The Builder.

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Second Premiated Design for Battersea Public Library.—By Messrs. T. Chatfeild Clarke & Son ..... *Single-Page Photo-Litho.*
Chest in Minehead Church.—Drawn by Mr. W. Newton ..... *Single-Page Photo-Litho.*
Cottages erected at Leicester.—Mr. Isaac Barradale, Architect ..... *Double-Page Ink-Photo.*
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The National Art Congress at Liverpool.

THE "National Association for the Advancement of Art and its Application to Industry" (there is a point, as the reader will see, in giving the full title) has certainly put forth an imposing programme for its first meeting, which is being held during this week at Liverpool. A glance at the list of papers, which we printed in full last week (see pp. 339, 400, *ante*), will show what an all-round review of the conditions and aims of art in its various forms is being attempted, by a whole phalanx of artists and critics, many of them men of the first standing in their art; and though it is too true that people cannot be talked into a perception of and feeling for artistic beauty, it seems impossible but that many valuable ideas should have been struck out during the week's discussions, and that many of the hearers should have been assisted to see things artistic in a new and a clearer light. This, indeed, as we shall find specially indicated in the President's opening address, was one of the main objects with which the Association was set on foot. In spite of the picture-purchasing propensities of the day, in spite of the undoubted improvement in taste in such things as household furniture and fittings in recent years (to which Sir F. Leighton hardly does justice), it is still true that the majority of English people labour under an apparently almost constitutional inability to distinguish between what is good or bad, refined or vulgar, in art; that, in fact, most of them do not really know or feel in what the artistic spirit in design really consists. That is the great stumbling-block in regard to the prospects of art in this country. Many Englishmen who are quite ready to admit that one ought to have art,—that art is a noble thing; that the culture and development of art should be encouraged,—really do not know what art means, and confound it with mere costliness, luxuriance, and finish of workmanship. Many, probably, have no innate capacity for ever knowing more than this; but in many others the power of artistic perception is dormant, and may be aroused and fostered by inducing them to regard art as a subject worth serious consideration, and not a mere amusement or indulgence for wealthy persons, by teaching them to think where they have never thought before. It is, as we gather, with this object that the Association has started the idea of holding meetings in large provincial centres for the discussion of artistic subjects. The precedent is furnished, of course, by the British Association for the Advancement of Science, which has for so many years past held annual congresses in the principal towns of the realm, for the discussion of scientific subjects. It must be borne in mind, however, that the cases are not parallel; the conditions are not the same. As we observed from the first in regard to the Art Association (and we are glad to see that the *Times* urges the same point in its leading article of last Monday), science is essentially progressive, art is not; annual scientific meetings have each year new facts to bring forward, new discoveries to announce, and a new position to work from. Art, except in regard to its processes, does not depend on the collection and verification of scientific data; it is, in a sense, the same yesterday, to-day, and for ever, and cannot profess to progress with definite steps which can be announced year by year. And for this reason those who govern the working of the Association will be wise to restrict somewhat the number of their congresses, and not attempt to rival the Association for the Advancement of Science by holding annual meetings. Such a course would be apt to lead to "vain repetitions" of the same exhortations and criticisms in slightly varying language; and the very extent and variety of the Liverpool programme suggest the impossibility of repeating the same "function" in another town next year with the same effect. It is good to talk about art from time to time; but not too often, seeing that the essence of art is not in talking. Wherefore we recommend that the Art Congress should not be attempted as an annual event.

The main object of the Congress being, as observed, the guidance and formation of public taste, one idea which it has evidently been intended to emphasise, as indicated in the latter part of its title quoted above ("Art, and its Application to Industry"), is that Art is concerned as much with the little every-day things of life as with such productions as pictures and statues. It is, indeed, in the make and fashioning of every-day objects and utensils that the presence or absence of the artistic spirit in a people is perhaps most distinctly indicated. As the President observed in his opening address, we see nowadays, with a kind of rueful astonishment, collections of the utensils belonging to people of some past times, in which there is "nothing ugly;" a condition of things the possibility of which we can hardly realise now. We walk through the Greek vase rooms of the British Museum, and find ourselves among a collection of things, all of which, down to the smallest, are fashioned with an eye to a kind of stately yet delicate symmetry and grace. The people who can thus

> "Give to barrows, trays, and pans,
> Grace and glimmer of romance"

(a charming sentiment of Emerson's, though an atrociously bad rhyme), are more certainly and evidently artistic in spirit than could be proved by the more occasional production of great paintings and statues. The latter might be the work of individual and exceptional genius, the former show that artistic feeling is in the hearts of the people at large. It is in connexion, no doubt, with this view of the objects of the Congress that the President alluded, in his opening address, to the fact that "the chief magistrate of an important centre of English industry, the Mayor of Preston, wears at this time a chain of office which is a beautiful work of art, and this chain was not only designed, but wrought throughout, by the sculptor who modelled the stately commemorative statue of the Queen that adorns the County Square at Winchester." Mr. Gilbert's beautiful bit of gold work, referred to here, we alluded to when it was exhibited in the Royal Academy sculpture-room this year. Perhaps it is owing to the fact that the artist of this, and of the metal figures on the Fawcett Memorial, is President of the Sculpture Section of the Congress, that we find "the precious metals" forming the subject of a paper read in that section by Professor Roberts-Austen.

The Congress could not have been better and more suitably prefaced than by the President's admirable address. Sir Frederick Leighton is certainly open to the charge of being sometimes over-flowery and unduly discursive in his addresses and speeches on art; but his address on Monday night was open to no such criticism: it was not too long; it was eloquent where it touched on subjects on which every lover of art must of necessity be eloquent; it gave a comprehensive and logical summary of the objects of the Congress; and it was interspersed with capital satirical hits in criticism. The special deficiency of the English mind in regard to

art Sir Frederick defined as the want of consciousness that anything claiming to be a work of art, from a great palace to the smallest production, is such only "on condition"—of what? That is the difficult thing to define; for it is the attempt to express in words what cannot be expressed in words, or we should not need art at all. This, *bien entendu*, is our own reflection, not Sir Frederick's. He says, "On condition it contains the precious spark from the Promethean rod, the divine fire-germ of living beauty." One of his predecessors in the Royal Academy chair, Sir Joshua Reynolds, stood before a work of no genius, and said, "It wants—it wants *that!*" and snapped his fingers as he spoke. These are only different ways of saying the same thing; either of them will do; the great point is to persuade people that something *is* wanted, beyond mere execution, to constitute any production a work of art; that it is their business to train their intellect and feeling to perceive the presence or absence of that "something," and that until they have achieved that, the world of art is closed to their perceptions. Among other points in the address we may mention the passing criticism on the Japanese and the curious phenomenon which they present, of a people with the most intuitive perception of artistic beauty in decorative work, without the slightest perception of beauty or dignity in the human form. Sir Frederick is severe, and justly so, on the treatment of the National Gallery architecturally; the competition for designs for a new building; the utter throwing over of the whole scheme; and the building of ugly and unmeaning excrescences on to the existing building, with utter disregard of architectural fitness or beauty; and adds "I have never heard one single word of articulate public reprobation levelled at this now irremediable blot on what we so complacently call the finest site in the world; and yet I cannot find it in my heart to believe that many have not, like myself, groaned in spirit before a spectacle so deplorable,—a spectacle which, indeed, is only conceivable within these islands." Sir Frederick might have found an even more monstrous example in the case of the defacement of one of our great cathedrals by the bungling architecture of Lord Grimthorpe, about which also there has never been a word of what could be called "public reprobation," and of which also it may be truly said that it is "a spectacle only conceivable within these islands." The utter deadness of the English perception as to sculpture Sir Frederick does not exaggerate, though we do not agree that to the majority sculpture only means the execution of Mr. Somebody's portrait in bronze, or marble, or terra-cotta. The British public will also take interest in mild devotional works of sculpture, "The Evening Prayer" and such other instructive figures, and in realistic sculpture of the "Oh! you dirty boy!" type. It is with sculpture as Sir Frederick himself says it is with painting; to most people "the attractiveness of a work is in proportion to the amount of literary element which it carries"; and the popular taste in this respect may be delightfully gauged by the character of the works which, in our exhibitions, are labelled in the catalogue "copyright reserved," which means that they are to be engraved, as works of special interest, for one of the popular illustrated journals. Nor is there a less significant indication of public taste to be found in the character of our ordinary gold and silversmiths' work, in "the nymphs and goddesses," as Sir Frederick sarcastically puts it, "the Satyrs and the Tritons, that disport themselves on the ceremonial gold-smithery of the United Kingdom."

Mr. Aitchison's address as President of the Architectural Section, which was delivered on Tuesday, dealt with the subject of "Utilitarian Ugliness in Towns," and insisted strongly on the public advantage of the study and appreciation of noble architecture, even to those who could not afford to build themselves, for their knowledge and appreciation would encourage a higher and deeper professional study, and would reward its success. This feeling, that a higher appreciation of architecture by the public, and a greater interest in the subject on their part, is almost a necessary condition of any great and wide-spread improvement in the standard of our national architecture, has been often expressed in our columns. As long as the public and their representatives in the Legislature care nothing about architecture, economy will continue to be the first consideration in regard to all our national buildings. Mr. Aitchison urged that architecture should be a subject included in general polite education. The fairer half of mankind in this country were habitually taught music, but whoever thought of teaching them architecture,—the art which, in its nature and principles, offered the closest analogy with music?

The best point in Mr. Walter Crane's presidential address in the Section of Applied Art on Wednesday morning, which was listened to by a crowded and sympathetic audience, was his hit at the Royal Academy as an institution purely for exhibiting paintings, to the neglect of art in its larger sense. We speak without prejudice on this head, inasmuch as we have always opposed the exaggerated views of the critics and artists of the modern "Decorative Art" School, who almost condemn picture-painting as an inferior art, and speak as if art workmanship in decorative work were really the highest branch of art. It may be that this kind of exaggeration is necessary in order to get the public at large to realise at all the true importance and interest of artistic craftsmanship. But we have always maintained that a fine picture is an object of more intellectual interest than a fine gold bracelet or a fine wrought-iron grille; and we shall continue to think so. But when we come to consider how the spirit of working which is called "artistic" may be exhibited in every kind of thing that is made or produced by man, it does indeed seem absurd to think of the proportion of space given at the Royal Academy exhibitions to one popular form of art,—to the production of a great picture-show, with little comparative room for sculpture and almost none for decorative art, which has only been permitted a kind of stealthy representation in the shape of a few stray articles clandestinely admitted into the sculpture-room. This method of arranging and apportioning the work annually exhibited at the Academy is in reality, if "the Forty" would confess it, a mere response to vulgar popular taste. Popular taste demands pictures; and pictures, some good, many indifferent, are accordingly supplied; but in truth it is the duty of the Royal Academy to lead, not to follow, public taste. Some of "the Forty" know this well enough, and probably feel it keenly; it is to be hoped that in time they may influence their more dull and conservative brethren to move in the right direction. Mr. Crane suggested that there was a great opportunity for the Academy to give practical proof of its interest in decorative art, by giving its rooms for the next exhibition of the "Arts and Crafts Association"; but that is hardly to the point; what is needed is that the Academy should give to the Arts and Crafts their fitting relative place in its own annual exhibitions.

The paper on the difficult subject of "Style," read on Wednesday afternoon by Mr. Basil Champneys, turned mainly on the necessity for architects aiming at the establishment of a harmony of principle in their works, arising from close care and attention to detail, based on the study of the best and purest styles. In the course of his paper Mr. Champneys made a protest against the endeavour after "originality," as leading too often to the pitfall of mere eccentricity, and away from the highest characteristics of refinement and restraint; and also raised the question as to the reality of the theory which has been often heard of late, that Mediæval architecture was essentially the work of a band of craftsmen rather than of the mind of a single designer:—

"We shall all, especially architects, who have learnt by sad experience, admit that the present order of things, in which the workman is no longer the intelligent co-operator with the designer, has greatly altered the conditions of architectural enterprise. I am inclined to think that the condemnation of the modern workman as a mere intelligent machine is carried too far by many theorists; and that in the comparison of modern with ancient workmanship to the condemnation of the former, a considerable range is given to fancy. It is almost impossible to dissociate the imaginative charm which attaches to all ancient work from actual superiority in workmanship. But without further discussing this question, we may at least assume that the changed conditions of architectural work must affect the character of the style. If the whole process of building, from the design to the detail, is the work of one mind, the character must be different from that arrived at by a more or less co-operative process. What in the one is a natural charm will in the other become an affectation. If we attempt to reach by artificial means the sort of spontaneous variety which is characteristic of genuine Gothic we shall fail of our effect with those who know that Mr. So-and-So has had individually to discharge the functions of a guild of workmen. The moral of this, however, is not that the style is out of our reach, but that its expressional character must be adapted to modern conditions. Nor, indeed, do I think that in yielding to those conditions—in letting our work seem, as it is, a matter altogether of deliberate design, we shall be leaving all precedent behind us. I fully admit that the charm of spontaneous variety is the note of much Gothic work, but do not admit that it is the main characteristic of all. I can recall many Gothic examples, from the study of which I carried away a predominant impression of design. I saw the entire work ordered in due and beautiful proportions, with no departure from the original scheme, with little if any trace of mental movement on the part of mason or carver. There is the architect's Gothic as there is workman's Gothic, and to whichever may attach the greater charm, for the present at least one type only is open to us. And this condition of successful modern work in Gothic seems to me to have been appreciated by our best modern designers. Such a work as St. Augustine's Church, at Kilburn, relies mainly for its effect upon design in its larger sense, while in its purity and originality of form it evinces a masterly appreciation of the true spirit of Gothic architecture."

It was a curious chance coincidence that Mr. Jackson, in his paper which immediately followed, touching on the same point, introduced some absolute proofs, from old building contracts, as to the position of general director and designer of the whole work in all its details, often openly and distinctly occupied by the mediæval "master-mason." A speaker, in the short discussion which followed on Mr. Champneys's paper, made the exceedingly practical suggestion that architects should make an endeavour to see to it personally, on all their works, that each workman should have a distinct idea of the whole building, and of the relation of his individual work to the total. This is a suggestion which is worth noting and emphasising. Mr. Jackson's paper on "Obstacles offered to the Progress of Architecture by Architects themselves" was a most admirable one, listened to, we regret to say, by a very small audience, "fit though few," and fitly representing, we fear, the proportion of the public who really take any interest in architecture. His main point was that a great deal of the bad architecture of the day was chargeable to the neglect of his duty by the architect; that the essence of fine architecture began where detailing began; that the hand of the artist was really shown in the way in which every detail of a building was carried out in a refined manner, and with due consideration given to it by the designer of the building. Mr. Jackson produced some dreadful evidence which had come to his knowledge, derived in many cases from contractors who had some perceptions as to architectural work (and, of course, without giving names), as to the utter indifference of the so-called architects of some large and important buildings in regard to their details, which were all either done by a "ghost" or by the contractor himself. Mr. Jackson thought we should look at home before abusing the public for their want of taste. On the other side, it may be said that it is because the public care nothing about good architecture, and are utterly indiscriminating in the matter, that there is so little inducement for the most cultivated and thoughtful class of men to put their best mind into architecture, and that for the same reason it is that in so many cases an architect is selected

for reasons of mere interest,—because he is Surveyor to the Company who are about to erect a new building, or something of that sort,—and not because he is an artist. This side of the case must not be forgotten; but Mr. Jackson's side is perfectly true, and his paper was an admirable one, both in substance and literary style.

Mr. Brett's paper on "The Relation of the Pictorial to the Decorative Arts" was, as every one would expect from him, incisive and brilliant; we shall probably return to it more at leisure; meantime we cannot resist extracting the following little shaft, directed against unconstructive and thoughtless so-called "decoration":—

"In Greek architecture the design was so perfect that ornament was rarely admitted. Only the highest achievements of sculpture could by any means add to its dignity, and that was a primary element of the architectural conception. Where the structure is faulty, as it usually is in modern times, I will admit that it is a legitimate function of decoration to conceal the weakness of the design. The modern Englishman, however, believes profoundly in decoration as an independent source of pleasure; and if any of the London shopkeepers, who are busy pasting over the inside of our dwellings with their tedious patterns and flourishes and their pink and green cornices, were allowed to get at the Parthenon, they would treat it in the same way, and they would logically proceed to 'tattoo' the sculpture.

I am grieved to say that some person has been allowed in this way to desecrate one of the most beautiful Norman churches in England,—that of St. Cross, near Winchester. This is really worth seeing, as it marks, to my mind, the utmost depth of iniquity to which a decorator may descend."

These be bitter words indeed! We regret that it is impossible to dismiss (for the present) the subject of the Art Congress without a strong and very decisive protest against the utterly unbusiness-like manner in which the arrangements for reading papers were carried out. These were altered every day from the announced programme, sometimes at a moment's notice, in a manner which became absolutely exasperating, and gave rise to very strong comments on the part of people who could not discover when or where they were to lecture or to hear lectures. On Wednesday morning a large meeting for discussing the question of Sunday opening of museums,—a matter which has nothing to do with art, and ought never to have been forced on the Congress at all,—was made the excuse for suddenly stopping all the sectional meetings, sending away lecturers and listeners to speculate as to when they were to meet again. We do not know precisely whose fault this is, but it is clear that some one in connexion with the management has no head for business and no consciousness of the necessity of systematic arrangement; and this must not be allowed at another Congress.

NOTES.

THE Rhymney "Preference rate" case, to which we drew attention in our issue of the 10th ult., was again before the Railway Commission last week. It will be remembered that the Commissioners decided against the railway company, and,—as is usual under such circumstances,—they have been endeavouring to carry the case into a higher court. The Commissioners were asked to state a case upon certain questions of law, but the chief Commissioner, in the course of a lengthy and exhaustive judgment, again decided against them. Sir Frederick Peel declines to treat as points of law matters which are really only questions of fact, and he showed in a very clear and lucid manner that some of the points now raised came within the latter category. It was again explained that the Commissioners distinguish carefully between justifiable preference and undue preference; and further, that their construction of the Act being supported by previous judicial decisions, there was really no point of law upon which to base an appeal. It is satisfactory to know that the Rhymney Iron Company will not have to bear the expense of another trial, and that the Commissioners have confirmed their original decision in such a decisive and unhesitating manner. It is a matter for congratulation that Sir Frederick Peel is to be retained as one of the permanent Commission appointed under the new Railway and Canal Traffic Act, as his experience and insight will be of very great service. It has been announced in the House of Commons that this has been definitely settled, the other lay Commissioner being Mr. Price; while Mr. Justice Wills (who for many years acted as counsel for the Midland Railway Company) has been appointed President in England, Lord Trayner in Scotland, and Mr. Justice Murphy in Ireland.

THE meeting held on Wednesday afternoon at King's College, to take into consideration the present condition of the Church of St. Mary-le-Strand, was not by any means unanimous, but the resolutions submitted were agreed to by substantial majorities. Professor Hayter Lewis wrote:—"I most cordially wish success to the efforts to preserve so beautiful a building. A stranger, ignorant of our wonderful ways in London, must be surprised that there should be any doubt or difficulty about its preservation." A letter was also read from Mr. Wyatt Papworth, cordially supporting the movement for the preservation of the church; and Mr. F. C. Penrose, Mr. Ewan Christian, the Rev. Precentor Venables, and other gentlemen well known as architects and antiquaries, were present. Mr. J. Macvicar Anderson, the architect who has been consulted by the rector, presented the following report:—

"In accordance with instructions received from the Rector, I have made a careful inspection of the stonework of the Church of St. Mary-le-Strand.

The cause of the serious fractures that have occurred in the stonework is, in my opinion, the iron chain bond which has been built into the walls, and the iron cramps which have been used in fixing the masonry. The iron has oxidised, in some instances to such an extent as to be now nearly double its original section, with the inevitable result of having split and fractured the stonework surrounding it.

So far as I can ascertain, there are two tiers of iron bond on the inside of the church, and two tiers on the outside, in both cases within some 4 in. or so of the face of the walls, and upon the same levels.

In order to restore the stonework to a state of safety, I consider that it is essential to cut out of the walls, externally and internally, the whole of this iron bond, and to remove whatever iron cramps may have been used in fixing the stonework; making the walls good thereafter with stone to match the present.

The balustrade on the building, outside, is in a very dilapidated and ruinous state, and I consider that the only satisfactory course is to remove it entirely, and replace it with new work of precisely the same design.

The upper member of the cornices externally is very much decayed. I recommend that it should be worked off and replaced with new stone to match the old; and in order to avoid such decay occurring in the future, the whole of the external cornices should be protected by a lead covering.

There are many defective and missing stones. These require to be renewed and the masonry generally requires to be carefully pointed.

The tower appears to be in fair condition, but the vases and terminals, which formed part of the original design, and have been removed, should certainly be restored.

The vases which surmounted the balustrade on the top of the church should also be replaced.

With respect to the cost, it is difficult to give an exact estimate, because it is impossible to ascertain positively, without cutting away the stonework, to what extent iron may be imbedded in the walls. I am, however, of opinion that the conjecture I have arrived at in respect to the position and extent of the iron bond and cramps cannot be far wrong; and assuming that to be the case, I am further of opinion that the cost of carrying out in a thoroughly sound manner the works I have described, including the redecoration of the interior of the church, so far as that may be rendered necessary, would be about 3,000*l.* (three thousand pounds)."

The chairman of the meeting, the Bishop of London, having spoken very warmly in favour of the preservation of the church, Mr. Ewan Christian moved a resolution affirming the desirability of repairing and reinstating the church. This was seconded by Mr. F. G. Hilton Price, but it was not carried without considerable discussion, the principal spokesman of the opposition being Mr. Cole, a tradesman in the Strand, who affirmed that the church was an obstruction to the traffic, that the congregation was very small, and that Mr. Macvicar Anderson's report as to the cost of the work was greatly at variance with the report of the architect (Mr. Albert Vicars) who was some time ago consulted by the churchwardens, and whose estimate for repairing the church was stated to be 8,000*l.* Subsequent speakers pointed out that there was no real ground for the assertion that the church was an obstruction to the traffic, and that if there were, a wider road should be made on the north side of the church, as suggested in the *Builder*. The rector, the Rev. Lewen Tugwell, denied that the congregation was so very small as had been suggested. As to the question of cost, little further was said. Eventually, the motion was carried by a large majority, as were resolutions appointing a committee, and pledging the aid of the meeting. Promises of subscriptions amounting to about 500*l.* were announced in the room.

REPRODUCTIONS of working drawings, &c., on a large scale by the blue print process are somewhat costly and difficult to make, owing to the size of the glass frame and other considerations. Professor Cleaves has introduced a process by which prints of any size can be made without a glass-frame. A cylinder is used of a length exceeding that of the drawing, and of a diameter such that the tracing can be conveniently wrapped round it, with sufficient space to give room for the clamps by which it is held. This cylinder is covered with felt, and the sensitive paper is carefully wrapped round it, the tracing to be copied being drawn over the whole and held smoothly in place by spring clamps. It is easy to lay the tracing smoothly over the surface and draw it into contact so perfectly that the work done is even better than that produced by the glass-frame and air-cushion commonly used. When the apparatus is ready it is mounted on a cradle and revolved in the sun by a cord driven by any convenient shafting, or by hand. A little more time is naturally required than that necessary for the flat process.

MR. BURNETT'S Report on the nail and small chain making industries of the Black Country has just been published. It is a dismal recital. The manufacture of machine-made nails, the influx of female labour, and the relative increase of the class of middlemen, or "foggers,"—the equivalent of "sweaters,"—has reduced these trades to the wages of semi-starvation. It is estimated that about 15,000 people are engaged in the nail-making, one-half of whom are females, all situated within a circle of about ten miles, whose centre is at Dudley. It is essentially a household industry, grandsire, parents, and children, male and female, working therein. The shops are dingy sheds in the rear of the dwelling-houses, small, dark, and dreadfully insanitary, privies and ash-pits being full to overflowing. The labour is of a most exhausting character, men and women work in a semi-nude condition, and the perspiration streams from their faces. Decency is impossible. The married women bring their babies to the shops, and sling them in boxes from the roof-beams, or seat them on the bellows, or among the breeze beside the forge. Notwithstanding domestic claims, they will spend ten or twelve hours in work daily, even when far advanced in pregnancy, at the forge. The single women work longer still, and the men frequently toil from six in the morning till ten at night. The wages of married women will range from 2s. 6d. to 3s. per week, of single women from 4s. 6d. to 5s. 6d., and those of men from 9s. to 10s. This represents *net* earnings, for, although the employers' books will show larger sums, there are the deductions for rent, breeze (small coal), and other incidentals to be taken into account. Those who work for the "foggers" will clear less than those who take their nails to the regular warehouses. The "fogger" takes advantage of the necessities of the half-starved people in times of dull trade, and buys their nails below list prices. It is stated, although it is confessedly difficult

of proof, that the Truck Act is evaded, the "foggers" and "foggers'" wives keeping provision shops, where the people are expected to deal. There is practically little Factory inspection, neither is such desired, lest the miserable gains obtained by working prohibited hours should be diminished. The small chain trade is about as bad as the nail trade, and the remarks applicable to one are generally applicable to the other. The two trades have much in common, and are carried on in the same districts, sometimes in the same shops. Mr. Burnett believes that pure individualism has largely contributed to reduce the workers to their present wretched condition, "each fighting for his own hand, and either underselling, or being undersold by, his neighbour and fellow-toiler in the struggle for his daily work." Numerous suggestions for the amelioration of the condition of the workers close the report, most of which are of a merely palliative character. We trust that the Committee of the House of Lords now sitting on the Sweating System will take evidence from these districts. The state of the workers is so wretched that self-help is almost impossible. The only hope is, that if the light of publicity can be brought to bear upon the degradation of men and women in the Black Country, it may lead ultimately to a better state of things. Mr. Matthews stated in the House of Commons on Monday night that such is the intention.

THE annual Christmas Exhibition of the Donegal Art Needlework was held on Saturday last at Donegal House, 43, Wigmore-street. It was an exceedingly interesting exhibition, for not only were there many really artistic specimens of needlework on view, but Mrs. Ernest Hart seemed anxious to explain her methods of teaching and training the workers, from the weaving and dyeing of the wool or flax, to the finished and elaborate embroideries. Mrs. Hart has started technical classes in some of the poorest and most congested districts of Donegal, where the Irish girls are taught hand-loom weaving, drafting, designing, textile calculations, pattern-making, embroidery, lace-making, and vegetable dyeing. This latter is an important item, and Mrs. Hart has gone thoroughly into the matter, and has made experiments in her own laboratory, on the different colours that are to be obtained from the native flowers. The wild heather (growing in such profusion on the bogs) is one of the richest in colouring matter, and yields many varieties of tone. We noticed many beautiful specimens of linens for decorative purposes; one kind, which had a softness and lustre equal to satin, had been ordered (so Mrs. Hart informed us) for curtains and draperies for the English department of the Paris Exhibition of 1889. Among some of the finest embroideries we noticed a beautiful coverlet embroidered in old-gold silk on white poplin, from a fifteenth century pattern; a panel for the front of a lady's dress, with bodice trimmings to match, in which the ground as well as the design was worked, the stitches radiating from different centres so as to give different lights. There were some pretty designs in "spring-time curtains," each curtain having a different pattern on it. We noticed some new ideas for cushions, screens, and such small things which must necessarily be in a house, and on which were embroidered mottoes and lines of poetry, with appropriate designs (by-the-by, some of the designs were not very appropriate: a landscape in wools, however much conventionalised, is hardly art). These things are all so thoroughly well done that they will last, and may perhaps make our poets more familiar to the children and the unreading public than the bound books lying on the shelves. Though the attempt to make a special market for Irish products of this kind may be a doubtful policy, in a political economy sense, yet one cannot but recognise that Mrs. Hart is doing a great work, for not only is she teaching and training thousands of poor ignorant girls, and giving them some hope of raising themselves by their own dexterity, but she is placing before the public thoroughly good materials and work, and though it may not be exactly what the public wants, it is so excellent of its kind that we can only hope it may of its own worth create a demand.

AT their meeting on Thursday, November 29th, the Court of Common Council adopted two reports by their Markets Committee. These provide for an extension of Billingsgate Market, and the erection of a new market for fruit and vegetables, on an area of nearly 60,000 feet superficial, which has lain waste for several years past, at the corner of Farringdon-road and Charterhouse-street. Costing 15,500*l.* after the City Architect's drawings, it will supplant the present Farringdon Market, which seems never to have been a great success since it was opened in 1829, in the buildings designed by W. Montagu, over the site of Fleet Market. This last-named had been established here in 1737, upon the demolition of the Stocks Market, by Walbrook; the Fleet ditch, between Holborn and Fleet bridges, having been,—as, indeed, was high time—covered over. The Court further resolved to expend a sum of 700*l.* upon sundry sanitary improvements at the Mansion House; which, designed by the elder Dance, was begun in 1739 upon the old Stocks Market ground. Fishing-boats paid dues at Billingsgate in Æthelstane's day. In "1st Eliz." the wharf or quay was declared by statute to be an open place for the landing and bringing "in of any fish, corn, salt stores, victuals, and fruit (grocery wares excepted), and to be a place of carrying forth of the same, or the like, and for no other merchandises." That Act was, perhaps, aimed at a growing practice, which is illustrated by a previous record of 1550: "There came a sheppe of egges and shurtes and smockes out of France to Byllyngesgatte." In 1699 an Act was passed to limit the traffic to "all sorts of fish." The premises were rebuilt by J. B. Bunning, architect, in 1849-53, and have been since enlarged. The proposed additions will occupy a recently-cleared area in Lower Thames-street, at an estimated cost of 19,215*l.*, with rentals of 5,245*l.* in the aggregate, and an annual expense of 4,514*l.*

WE hear that Brooks's Club-house, in St. James's-street, is about to be enlarged by the addition thereto of the two adjoining houses in Park-place, at an estimated cost of 1,400*l.* The present premises were built in 1777-8 by Brooks, money-lender and wine-dealer, from the designs of Henry Holland, who was architect, also, of Boodle's. At one time the chief temple of wagers and deep play, this club originated with a *coterie* who used to meet in Almack's gaming-house, when kept, we take it, at the old Thatched House Tavern,—now site, in part, of the Conservative Club, Smirke & Basevi, architects, 1843-5. But the existing club was established in 1764, by some leading Whig peers and commoners of that day, and, it appears, in a house on the sunny side of Pall Mall. That house was rebuilt for his once popular "Shakespeare Gallery" by Alderman Boydell, who paid Thomas Banks 500 guineas for the bas relief on the front—it remained to our own day—of Shakespeare with Painting and Poetry. A fine engraving of this group will be found in the collection of large-sized engravings that was made of the pictures. On the dispersal of Boydell's paintings in 1806, a committee bought the lease for the British Institution. That was closed in 1870, giving place to the Marlborough Club. Amongst the earlier members of Brooks's were Charles James Fox, who for a while lived next door; George Selwyn, Wilberforce, Wilkes, Sheridan, whom Selwyn black-balled more than once only because his father had been a player; Gibbon, Sir Joshua Reynolds, Burke, and Garrick.

SIR JAMES PICTON, the veteran Liverpool architect, has published, appropriately at this moment, a pamphlet* on the history of the various Town Halls of Liverpool, first read as a paper before the Liverpool Architectural Society on the 26th of last month. Some portion of the information, in regard to the existing Town Hall and its inscription, we have already had in Sir James Picton's "Annals of Liverpool"; but the pamphlet gives, in a convenient form, a good deal of curious record as to the successive Town Halls of Liverpool.

* Walmisley; Liverpool.

THE *Art Journal* for December contains an article by Mr. M. W. Conway, on the Berlin Museum, illustrated by a couple of fine line engravings, one of which, by Jacoby, after Filippo Lippi, forms the frontispiece to the number. An article by Mr. Henry Wallis, on "the Glass and Ceramic Gallery at the British Museum," is of great interest both for the information it gives and the admirable cuts with which it is illustrated. "A Foreign Artist and Author in England" visits Ramsgate and Margate in this number, and his sketches are admirably characteristic.

THE *Scottish Art Review*, which continues to show itself one of the most able and intellectual of the recent art periodicals of the day, contains this month a notice of the life and works of the late Mr. Sellars, the architect, with a portrait and some small illustrations of some of his designs. An article on the exhibition of decorative handiwork at the Royal Scottish Academy, with some illustrations, is of interest; and among the contributions is a short notice by Mr. Leland as to a supposed discovery of the existence of jade in the island of Iona. "A Ballade of Kelvin Fair," with some sketches, commemorates half-humorously the Glasgow Exhibition—

"The gaudy bubble that we blew."

A small landscape, an evening scene by Mr. O'Meara, makes a charming illustration; landscapes of the "impressionist" school have the merit of reproducing well.

WE have received Dr. Page's report to the Local Government Board on the circumstances attending an outbreak of small-pox in St. Joseph's Certified Industrial School, Manchester. The causes of the outbreak seem, however, to have been unconnected with any deficient sanitary arrangement of the building.

A ZINC-CREOSOTE process of preserving timber is described in the recent volume of "Proceedings of the Institution of Civil Engineers." The experiments from which the data have been obtained are from the observations of Mr. J. P. Caird, an American engineer, who communicated the details to the *Journal* of the American Association of Engineering Societies. After the timber has been prepared in the usual way by steaming and vacuum, dead-oil is run into the cylinder, and so much as may be desired is forced into the wood, half a gallon of oil or less to each cubic foot of timber being about the quantity required. The oil is then withdrawn from the cylinder, which is charged with chloride of zinc, and this by pressure is forced into the timber through and beyond the oil. In this way the wood receives the advantage of the dead-oil treatment with the expenditure of one half, or less, of the usual proportion of oil, and the chloride surrounded by the oil is protected for a lengthened period against moisture. It is stated that this process gives the best result for the money invested.

UNDER the title "Compañia Anónima Esploradora de las Huscas del Inca," a company has been formed at Lima, in Peru, with the object of "exploiting" the sepultures of the ancient Peruvian kings, in the hopes of recovering the extensive treasures of gold which tradition, hundreds of years old and handed down to the present day, affirms to be hid there. For generations these hopes have been kept alive among the Peruvians, and apparently with some reason. Tiahuaco, the Baalbek of the New World, lies a vast heap of ruins. Like Carthage it has been the convenient quarry for the building material

of many surrounding towns, for every village, every church, even the cathedral of La Paz in Bolivia, some three hundred miles off, has taken its stone from the ancient capital and necropolis of the Incas of Peru. A like fate has awaited the once-famous fortified city of Cuzco, where the enormous golden chain of Huayna Capac was kept, which was said to be long enough to go twice round the great square at Huacapata, the links, all of pure gold, being as thick as a man's arm. Some of the legends about these "tapados" or *covered* treasures are mentioned in ancient historical writings; thus Felipe de Pomanes mentions the existence, beneath the Castillo of Cuzco, of a vaulted chamber containing the statues of all the Incas in solid gold, and that in his time a certain Doña Maria de Esquival had actually seen them. This lady was the wife of one of the direct descendants of the kings by whom she was led blindfold into the vault. Again, the present aborigines all declare that the golden throne was cast into the Lake of Pultamarac, and that under the Temple of the Sun at Cuzco there is a "garden" with trees made of pure gold; when Humboldt was in Peru he heard the same story, and during the rebellion of Pumacacua, in 1814, the leaders are said to have found some treasures which helped them to pay their way: the rebels were defeated at Ayaverene, and Pumacacua promised his captors a "mountain of gold" if they would spare his life; he was executed, however, and the secret perished with him. The ancient Incas undoubtedly possessed large quantities of the precious metal; many skulls have been found covered with plates of gold. In the Temple of the Sun the walls, columns, and cornices were also covered with gold; and the great Sun and idols were of pure massive gold. When Atahualpa was taken prisoner by Pizarro, he offered a "room full" for his life; Pizarro required "two rooms full," and messengers went to fetch it, but news of the death of their chief reached them, and they buried the treasure in the forests of Dianganati. Few of these hoards have since been found, so that the enterprising Compañia has a large field for search, and—very sanguine shareholders.

THE *St. James's Gazette* of Saturday last, in an amusing article on "Christmas Annual-making," recounts how the manufacture of special effects and subjects comes in for a special value in these publications:—

"Some years ago two or three artists, although but little valued at other times, were always popular at Christmas from a certain dexterity in depicting mullioned windows with the light stealing from them on to the snow without, while returned wanderers, hidden beneath the ivy, gazed in at the home of their youth. In fact, there is a story told of a publisher asking a question about the skill of one of these talented gentlemen, and being answered, 'I don't know much about his being an *artist*, but he's the best *moated-grangeist* I ever came across.'"

"Moated-grangeist" is good, as Polonius would have put it.

ROYAL INSTITUTE OF BRITISH ARCHITECTS.

THE second ordinary meeting of this Institute for the present session took place on Monday evening last, Mr. Thomas Worthington (Vice-President) in the chair.

Mr. W. H. White announced the receipt of a bronze medal and diploma from Sir Herbert Sandford, on the part of the authorities of the Adelaide Exhibition, in recognition of the exhibit of photographs of recently-erected buildings sent by the Institute.

Mr. White also announced that the November examination of candidates for the Associateship commenced on Monday, the 26th of last month, and terminated on the 1st inst., when it was found that thirty-one out of the thirty-eight candidates who presented themselves had passed (applause).

Mr. White further stated that three members of the Council had offered a prize, to be called the Scientific Masonry Prize, of Ten Guineas, with a second prize of Five Guineas, to any British Architect or Student of Architecture who should produce, to the satisfaction of the Council of the Institute, the best essay on the following subject: "The Design of the Vaulting of the Entrance-hall to a Public Building."

Mr. J. Macvicar Anderson (Hon. Sec.) drew attention to the Church of St. Mary-le-Strand, which, as they were aware, had stood too long in a ruinous and discreditable condition. He believed every Member of the Institute would agree that it would be nothing short of a public calamity if the church were permitted to be removed (applause). There were Goths who desired to remove the church, on the score that the traffic of the Strand was impeded by it, and that its removal was necessary on public grounds. This allegation he had already taken upon himself to refute, inasmuch as the street opposite St. Mary-le-Strand was not the narrowest point of the Strand, which was at the neck of the bottle formed by the narrowness of that part of the thoroughfare opposite Mr. W. H. Smith's premises. The proper way to remedy this was by what had been more than once suggested, namely, to throw back the rubbishing houses occupying the north side of the street (applause). The view of St. Mary-le-Strand, from whichever side it was looked at, was one of the most beautiful street views in London, and he believed every one would strongly deprecate anything being done to destroy it. He had been asked by the rector and churchwardens to examine the church, and he had made a very careful examination, he need not say with great interest and delight, and had come to the conclusion that there was no difficulty whatever in renovating it at a very reasonable cost. He could scarcely believe there would be any difficulty in getting the public to subscribe. At all events, he would like to be in the position of having the sympathy of the Institute in giving expression to similar views to those which he had now ventured to express (applause).

Mr. Francis Hooper (Pugin Student, 1882; holder of the Godwin Bursary, 1888), then read a paper entitled "Building Control in Paris, with Notes on its Administration." The following is the substance of the paper:—

The task I am about to attempt is that of laying before you an outline of the chief provisions for regulating building enterprise in Paris and the agencies for their administration.

I cannot, however, proceed without expressing grateful recognition of the value of the Bursary, so liberally founded by the late Mr. George Godwin, to which I owe the opportunities I have enjoyed of studying my subject, nor can I omit to record the kind assistance afforded me by the Under Secretary of State for Foreign Affairs, and His Excellency the British Ambassador in Paris, in furnishing me with letters of introduction; by M. Alphand, Directeur des Travaux de Paris; and the honorary and corresponding members of this Institute, and by many others, of whose courtesy I shall always retain most pleasant reminiscences.

No new building, reconstruction, or addition may be commenced in any of the streets of the city, which all belong to the Grande Voirie, without the permission of the central administrative authority, which is the Préfecture of the Seine, resident at the Hôtel de Ville. The Prefect of the Seine exercises all the functions of Mayor of Paris with the exception of the control of the police. The police force is under the command of the Prefect of Police, who, like the Prefect of the Seine, is appointed by the Government, and, in his capacity of guardian of the safety of the streets and places of public assembly, administers the building regulations in regard thereto. The whole of the streets of Paris have, for purposes of simplification, been classified as belonging to the "Grande Voirie"; all building operations are, therefore, subject to control of the Prefect of the Department. The general classification of the roads throughout France as national, departmental, and parochial has been described by M. Waddington, the French Ambassador in London, in two most interesting articles on Local Government in France this year, in the June and July numbers of the *Nineteenth Century*. The small coloured map of the environs of Paris exhibited shows the classification of the roads immediately beyond the city boundaries. In order to obtain the necessary permission, application must be addressed in writing to the Prefect on *papier timbré*—that is, paper bearing the Government duty stamp of 60 centimes,—and must be accompanied by drawings.

Drawings for the erection of a new building must comprise plans of each storey, together with a cross-section showing the height and general construction, to a scale of 0·02 m., or about ¼ in. to the foot.

The *Law of Alignment* is for the purpose of adjusting the frontage of property abutting on irregular streets. Its application involves a "servitude" on all land which does not conform to the authorised alignment, preventing the erection, reconstruction, or structural repair of any building thereon, and which it is the duty of the Commissaire-voyers to see observed. It becomes necessary before sanctioning building operations along the public way to consult the Plan of Alignment. The Loi d'Alignement had its origin in the reign of Henri IV., 1607, when application for permission was required to be made to the Grand Voyer of the King before any building was commenced bordering on the grande voirie or highway, thus securing to him power to regulate the lines or frontage. About a century later, the need for systematic procedure becoming apparent, decrees were issued that every town having 4,000 inhabitants should prepare plans of its streets, together with recommendations as to the future lines of frontage to be adopted. The plans were prepared to uniform scales, one consisting of a general map of the town, the other giving, to a larger scale, all buildings abutting on the streets. The proposed lines of frontage recommended by the Mayor and Council were drawn in red; yellow colour showed the area of ground to be contributed to the thoroughfare; whilst blue showed any frontage that might be advanced on the then existing lines. These plans were submitted, through the Prefect of the Department, to the Minister of the Interior with observations, and, if approved finally by the chief of the State, was decreed as binding on every owner building or reconstructing his property along the highway. Thus it is that throughout France will be found plans upon which systematic alignment is in progress or has already been carried out. The equity of the "Servitude of Alignment" is based on the principle that the thoroughfares are public property; buildings, therefore, erected along them enjoy light, air, and convenience from their proximity, and their individual owners are held to reciprocally contribute to the enjoyment and convenience of the public.

When, from whatever cause, the owner of property to be set back desires to rebuild, the new alignment is followed unhesitatingly, and should he not be satisfied with the offer of compensation made to him by the municipal authorities, he can appeal to the jury at their next sitting for a consideration of his claims, and whose award is binding on both parties, unless taken before the Cour de Cassation. In the estimate of compensation no consideration is given to buildings on the ground to be vacated, as the owner may enjoy their use until, from decay or other causes, his property becomes subject to condemnation as dangerous to the public, and reconstruction would be necessary at his expense. In the valuation of the land much depends on the free space in the rear of the house. If only garden land the compensation is based on its value. If sufficient ground does not exist for rebuilding a healthy house, the whole site is purchased and offered at a price to the adjoining owner. Should the adjoining owner be either unwilling or unable to purchase the residue, even on the valuation of the jury, it is possible for the authorities to acquire his property by the agency of the "Law of Expropriation on account of Public Utility," and to dispose of the two sites as they deem best.

This law, not being costly in execution to the community, is applied in all the provincial towns of 4,000 inhabitants and upwards, as well as in some of the streets of Paris, where the exceedingly slow operation is not of great inconvenience.

The "Law of Expropriation on Account of the Public Utility" provides for the immediate acquisition of property by Municipal or other authorities, required for varying purposes, such as sites for public buildings, monuments, new streets, railways, &c., as well as buildings required for improvement, of the sanitation of a district. In order to secure the rights of the individual, three operations of great import-

ance are necessary in the application of expropriation:—

1. "The Declaration of Public Utility," by the State.
2. "The Judgment of Expropriation," by the Court of Justice.
3. "The Award of Compensation," by the Jury.

The necessary plans having been prepared, in accordance with certain general instructions, to fully demonstrate the scheme and the extent of the property proposed to be acquired for its execution (specimen exhibited), an *enquête préliminaire* is held at the Mairie of each arrondissement in which such property is situate. The enquête is announced by placards posted throughout the arrondissement (specimen exhibited), by advertisements in the local newspapers, and for fifteen days the plan is exhibited, that the owners and others interested may examine it and record their observations in writing. For three additional days a *commissaire enquêteur*, appointed by the Prefect, receives and records all verbal observations made to him at the Mairie with regard to the scheme. These observations may relate either to its questionable necessity or its efficiency, the excess of property to be expropriated or the insufficiency, as well as questions on the accurate representation of the several properties. The Commissaire-enquêteur also furnishes a full report, giving also his opinion on the scheme, which is forwarded, together with all the other documents, to the Conseil Municipal. The Conseil may determine to modify the scheme in accordance with suggestions offered, or to maintain the original plans. The plan and reports are next submitted by the Prefect of the Department, with his recommendations, to the Ministry of the Interior. The project is examined in the "Bureau de la Voirie," to which the whole of the thoroughfares of France are subject. If still approved, the documents are submitted to the "Council of State," and the scheme becomes effective by the signature of the Chief of the State to the "Declaration of its Public Utility." If technical advice be required on an architectural question involving, may be, the selection of a site of an important public building or the relation of a new street to national monuments, the Minister of the Interior will consult the "General Council for Civil Buildings." The constitution of this Council has been most ably described by Mr. W. H. White, in his work on "The Architecture of Public Buildings in Paris and London." In matters such as railways, bridges, or canals, the Minister of the Interior may consult the "Conseil Général des Ponts et Chaussées," such advice being usually followed.

Expropriation is the second stage of the procedure, and can only be pronounced by the High Court of Justice, when it has assured itself that provision is made for adequate compensation to all whose property and rights are to be acquired on the ground of "public utility." A second enquiry is therefore held, publicly announced like the first, and extends over eight days, during which time a "plan parcellaire" is exhibted. This plan, with certain additions (specimen exhibited), is the same as the former. All the properties to be acquired are numbered consecutively, and a list is attached to the plan giving the names of the several owners, copied from the "matrice cadestrale" or official register of property, together with the tenants reported by the Commissaires Voyers as having claims to compensation. This second enquête permits the notification of any interests which have been overlooked, and the correction of any errors in the description of property. The Court of Justice pronounces "expropriation on account of public utility," and, in the case of municipal improvements, a decree of cessibility by the Prefect renders the occupants of the property only tenants "at will" of the Municipality. The judgment of the Court is made public by advertisement, together with the offers of compensation made by the Municipality. If these offers are not accepted within eight days, application is made to the Court of Appeal for the appointment of a jury.

The Award of Compensation is made by a jury of twelve persons, selected from the special jury list, presided over by a "magistrat-directeur," being a judge of the Civil Tribunal. Claimants appear in person or by counsel, the jury making their award after a visit to the property. The awards are published in the official newspapers, together with the offers and claims, and are absolutely binding, unless notice to the Court of Appeal is given within fifteen days.

Line of Frontage.—The first consideration in all proposals for new buildings or reconstruction is the line of frontage to be adopted. This is ascertained by reference to the plan of Paris in charge of a special service at the Hôtel de Ville, on which are shown the lines of all authorised new streets as well as frontages to be adjusted in old thoroughfares.

Height of Building.—Dependent on the distance between the authorised lines of building frontage which, until the realignment has been carried out, does not always correspond with the effective width of the street, is the limit of the height of the building. A scale of dimensions fixes the maximum height of the front wall in proportion to the width of the street, as shown by the diagram exhibited, but, whatever may be the width of the street, square, or quay no wall abutting on the thoroughfare may exceed a height of 65 ft. 6 in.

Height of Roofs.—The outline roofs must be contained within the perimeter produced by describing a semi-circle, springing from the external face of the enclosing wall, having a radius equal to half the effective width of the street, but in no case exceeding 27 ft. 6 in. Dormer windows may extend 1 ft. 8 in. beyond the arc of the roof, but may not project over the wall, nor exceed in collective width two-thirds the length of building frontage. These regulations apply equally to buildings set back from the public way and to private thoroughfares and passages, always excepting that the enclosing walls of a staircase constructed in a courtyard may extend beyond the perimeter, in order that they may rise to the level of the ceiling of the highest floor served by such staircase.

Height of Storeys.—In all buildings the height of the ground storey, measured to the ceiling, shall not be less than 9 ft. 2 in.; the basement and other storeys not less than 8 ft. 6 in.; the storeys in the roof being measured to the highest part.

Courtyards and Air-shafts. — These are classified, as those which serve to light and ventilate: first, living-rooms; second, kitchens; third, water-closets and passages. The minimum area of each is precisely defined, being dependent on the height of the enclosing buildings. Provision is made for air-circulation in the event of any of the areas being roofed with glass. Several proprietors on making a formal contract with the City of Paris to maintain in perpetuity courts in common, these courts being together one and a half times the authorised area, the proprietors are permitted to raise their buildings to the height corresponding to the larger area. In the case of the union of several courts the height of the division wall must not exceed 5·0 m. The effect of these provisions is to render "light and air" disputes almost unknown.

Position of Windows.—The distance from party walls of windows not lighted from the street is the subject of legislation. This, however, is not administered by the Prefecture.

Number of Storeys.—The number of storeys above the ground is limited to seven, including the entresol and attics.

Central Administrative Service.—The "Department of Works" of the Prefecture of the Seine is presided over by a Director, assisted by a Sub-Director. The responsible office of Director has long been filled by M. Alphand, a distinguished engineer, known to British architects by the interesting works, published under his supervision, to illustrate the artistic and scientific developments of the city of which he is justly proud. M. Huet, the Sub-Director, is, like M. Alphand, an Inspector-General of Ponts et Chaussées. It comprises three main divisions, each of which has its responsible chief.

1. The water, canal, and drainage services.
2. The public thoroughfares.
3. The buildings belonging to the Municipality.

Divisional Service. — The second division, which has charge of the public thoroughfares, deals with all applications for permission to build, defines and verifies all lines of building frontage and levels, maintains the roads and footways, trees, street-lighting, &c., negotiates for the sale and purchase of property, and superintends the execution of street improvements. To M. Deville, the chief of this division, I am indebted for invaluable assistance in collecting particulars of the laws in force for effecting street improvements, and the method of their application.

Service du Plan de Paris. — This service, though independent of the three main divisions of the Department of Works, and responsible only to the Director of Works, is closely associated with all the operations of the Division of Public Thoroughfares. The work of this service is, to preserve a correct plan of the city, showing the authorised alignment of every street, for the purpose of determining the lines of frontage to be followed in the case of applications for permission for new buildings or reconstructions bordering on the public streets; to prepare plans of all property bought or sold by the Municipality; and to elaborate schemes for new streets and the improvement of those existing. To the chief of this service, M. Hochereau, himself an architect by education, I am indebted for most kind assistance in collecting the plans and maps which I am able to exhibit. The wise forethought in matters of street improvement is well exemplified by a work published in 1878 (by the Prefecture of the Seine), entitled "Projets de Voirie," a copy of which I am able to exhibit. This work is a register of the various schemes which have been drawn up from time to time. These are classified (by Arrondissement) as street widenings or new thoroughfares. A description of each is given, with details of its length, the ground to be thrown into the roadway, the estimated cost of acquiring the necessary property, cost of construction and selling value of surplus land resulting in the approximate cost of execution. With such a register any Municipal Councillor or ratepayer can, without difficulty to himself or labour to the authorities, ascertain what improvements have been contemplated in his own locality.

Active Exterior Service.—The active staff of the Division of Public Thoroughfares, whose duties are very similar to those of the District Surveyor in London, have the title of *Commissaire-voyers*. The *Commissaire-voyer* is appointed by the Municipal Council after evidence is produced of his technical training and competence, either by certificates and diplomas or by reference to executed works. The appointment is permanent, and remuneration is by a salary, increasing according to length of service. These voyers are twenty in number, and are each being charged with the supervision of the building operations in one of the arrondissements of the city. Each has an office at the "Mairie" of his arrondissement, and is assisted by a Commissaire-voyer-adjoint, or deputy. The *Commissaire-voyer-adjoint* is usually a successful student of the Architectural Section of the École des Beaux Arts or of the Ecole des Ponts et Chaussées, who has passed the necessary qualifying examination. The examining board consist of three of the engineers of the service and two Commissaires-voyers. The subjects dealt with include drawing, geometry, physics, building construction, administrative law, and building regulations. The qualified candidates must not be less than twenty-five nor more than thirty-five years of age, and being placed by the examiners in order of merit, fill by rotation the vacancies as they occur. The examinations are held only when the list of qualified candidates is exhausted. Each Commissaire-voyer is required to reside within the arrondissement to which he is appointed. He is free to practise as an architect or expert only beyond its limits, and he may not act as expert in matters which the Municipality has interest in. The voyer is regarded, in cases of building infringement, as voyer of the whole of Paris, and is consequently held to report every instance which he observes. The fines imposed on the erring proprietor are handed to the voyer who first gave notice of an infringement. A report is rendered every three months, recording the various building operations, also works authorised but not commenced, as permissions are invalid at the expiration of twelve months. Cases of importance and difficulty can be submitted to the *Commission-Supérieure-de-la-Voirie*, of which the Director of Works is president, the sub-director vice-president, its members being the Chief of the Bureau of Alignments, the Chief Engineer of Streets and Promenades, the Chief of the Division of the Highways, three Commissaires-voyers as permanent members, two Commissaires-voyers appointed for one year only.

PREFECTURE OF POLICE.

General Building Regulations.—The police regulations are chiefly such as provide for the safety and convenience of street traffic. No barrier, hoarding, scaffold, shoring, or ladder, may be erected in the streets or thoroughfares without permission. Applications must

be addressed to the prefecture, on paper timbré, defining the nature of the requirements, and permission is granted only upon production of the approval of the Prefecture-of-the-Seine to any intended building operations. No fees are due in respect of these applications. The construction of temporary erections for fêtes, fairs, processions, &c., are all subject to police control. Theatres, places of public assembly, the factories of dangerous trades, prisons, &c., are subject to periodical inspection, and their construction to requirements of the police architects, based on carefully prepared bye-laws regulating the entrances and exits, mode of lighting, fire-hydrants, &c.

Active Exterior Service.—The active staff consists of ten architects, each responsible for the fulfilment of the police regulations in matters of building works within a district comprising two of the twenty arrondissements of the City, to the Superintending Architect (*Architecte-contrôleur*), whose office is at the Prefecture of Police. Vacancies in the staff of Architects to the Prefecture of Police are filled in rotation by candidates who have passed a qualifying examination conducted by the sitting architects. This examination, involving a knowledge of building construction, jurisprudence, and special practice, is held only as occasion requires. Remuneration is by salary increasing, every three years, until a fixed limit is reached. These architects carry on private practice, but, when undertaking work within their own district, are required to give notice to the superintending architect. The duties consist in reports on all applications for permission to erect barriers, scaffolding, &c., with recommendations for best securing the safety and convenience of traffic, periodical reports on the condition of the theatres, *salles des spectacles*, factories, &c., which are allotted to them independently of the limits of their respective districts. At a weekly meeting of the police architects reports and recommendations are submitted for the signature of the Superintending Architect, who presides, and who, in endorsing the reports, accepts the responsibility of their execution. Matters of difficulty are brought before this meeting, and action is taken after united counsel. The Superintending Architect undertakes personally the inspection of prison buildings.

I conclude this report by respectfully submitting that the course adopted with such eminent success by our public-spirited neighbours in Paris for the improvement of their city, should stimulate the efforts of British architects and engineers to educate the public, and especially Londoners, to the fact that expense wisely incurred in municipal improvements is not money lost. Spacious, well-planned thoroughfares facilitate rapid communication, and hence the transaction of business; they likewise promote the health and therefore the wealth of the inhabitants. Good approaches to the great railway termini would tend to promote suburban traffic, to the relief of the congestion of our central districts. The well-to-do inhabitants could live in our city with greater comfort, whilst the poor would not be so restricted in the choice of locality, as rapid transit would bring them quicker to their field of labour. Parisians already envy us our Inner Circle Railway, and this if organised in conjunction with our other railway services, might be made of still greater value.

London possesses great natural advantages: its tidal river, its subsoil, its water-service, facilities of drainage, and cheap building materials.

Mr. William Woodward, in opening the discussion, said he was sure that if Mr. George Godwin had lived to be with them that evening, he would have been delighted at the success of his liberal foresight in providing the Bursary which bore his name. He (the speaker) had had the pleasure of listening to all the papers that had been read by the holders of the Godwin Bursary. They had been excellent papers, but he believed that of Mr. Hooper would rank with the best of them, and be of great benefit to those who were engaged in the study of architecture, and particularly those who were preparing for the Architectural Examinations. The moment for the production of Mr. Hooper's paper was singularly opportune. London at the present time was in a state of what might be called transition; the body created by the Act of 1855 would shortly cease to exist, and London would be governed by a County Council, though whether that Council would secure better improvements than the Metropolitan Board remained to be seen. All that they could hope for was that it would secure them. If there were members present who favoured the proposal for leasehold enfranchisement, Mr. Hooper's paper would delight their hearts. It had been said over and over again that if ever that Bill became law, it would be absolutely necessary that some of the propositions named by Mr. Hooper,—which gave such immense power to the Municipal authorities in Paris,—should be introduced into London, otherwise the advantages secured would be small, and individual freeholders would be at liberty to do as they liked. With regard to the rights of light, Mr. Hooper had endorsed the views of many of them. Many architectural schemes in London were spoiled by the action of the owners of dominant lights; and, whilst he agreed with Mr. Hooper that there were many cases of extortion, his opinion was that the frequent litigations which arose in London on the question of the rights of light owed their origin very largely, if not entirely, to the action of the architects of proposed new buildings. Those architects, when they pulled down houses and attempted to erect larger buildings, knew well the rights of the opposite neighbours. Therefore it was within their power, when they were designing buildings, not to interfere with the rights of the adjoining owners. One of the most important parts of Mr. Hooper's paper was that which dealt with the question of street alignment, which was absolutely essential for the well-being of every city. If the rules or regulations enforced in Paris had been so enforced in London, the alignment would have been improved, and, in place of tortuous cab-routes, there would have been magnificent thoroughfares, with the street alignment properly considered. Their late President, Mr. I'Anson, had told them that the same excellent system was followed in Rome, the plans of proposed improvements and street alignments being exposed for fifteen days. A new street was now being formed from Holborn Town Hall to the Angel, Islington, at a cost of half a million. This was a very important street, because it became a connexion with the great western thoroughfare of Shaftesbury-avenue, and it also took part of the traffic of Gray's Inn-road; yet, notwithstanding the fact that Gray's Inn-road was 60 ft. wide, this new street was only being made 50 ft. wide for building. This had been done because nobody knew anything about it, and no doubt a strong outcry would be made when it was too late to be corrected (applause). He had to mention another subject, and in doing so it was only due to the Superintending Architect of the Metropolitan Board of Works,—Mr. Blashill,—to say that he had as great a regard for the health and beauty of the metropolis as any architect in the room, so that anything he might say must not be considered as in any way addressed to that gentleman. By an Act of George II, a new road was formed from Islington to Paddington, and the authorities of those days considered that, for the beauty of the avenue, the houses should be set back 50 ft. from the road. They all knew the encroachments which had taken place from King's-cross to Baker-street, but hitherto from Baker-street not a single encroachment had taken place upon the 50 ft., the result being a magnificent vista bordered with trees and shrubs. Only during the last three months an application had been made to the Metropolitan Board of Works for permission to take down four houses, just west of Seymour-place, and to erect a structure encroaching 45 ft. upon the 50 ft. The application was sent in in the usual way to the local authorities,—the Vestry of St. Marylebone,—who considered the matter in a public spirit and refused the application, which, however, was eventually allowed by the Metropolitan Board of Works in the face of the opposition of the local authorities, and in the face of the Act of George II. So that this was the encroachment of the projection of the line of frontage, and every house in due course would look upon that as the true line of frontage. Had the French system obtained in London, such vandalism could never have happened, for public opinion and criticism would have prevented it (applause).

Mr. Charles Fowler proposed a vote of thanks to Mr. Hooper for his valuable paper. It might be in the memory of some present that in 1874 the Metropolitan Board of Works proposed an amendment of the Building Act, which, amongst other things, contained provisions to limit the height of buildings; but, in the end, the Bill was thrown out. The Select Committee of the House did not think it desirable that the buildings should be limited in the way proposed, and, if any legislation on that point was carried out, it would have to be done with great care, so as not to interfere with the architecture. He believed a short Bill was still before the House of Lords, proposing to limit the height of buildings; but it was so crudely and negligently drawn that he could hardly conceive its being passed. It, however, showed what was in the air, and it would be necessary for the Institute to take some steps to see that legislation followed the right course. As to the principle of the prescriptive right of light, he, for one, could not understand why a man, because he had made a window looking over his neighbour's ground, and had enjoyed uninterrupted use of that window for a limited period, should have a right for ever to prevent that neighbour enjoying his ground (applause). He was glad to learn that prescriptive right did not exist in Paris.

Professor Kerr seconded the vote of thanks, and said that the paper raised some very important questions. The feature of the paper which struck him most forcibly was this,—that throughout the whole administration of architecture in Paris there ran the principle that architects should govern, while in England the reverse was the case. He did not blame the English Constitution for that. The French considered that all buildings should be administered upon a systematic and well-regulated plan, the public governing the individual; while in England such matters seemed to be entirely unknown. The liberty of the individual here was so sacred that people were most jealous of its being interfered with, even in the most modest way. So that even when they established the Metropolitan Board of Works, the members possessed no architectural knowledge, with the exception of one or two who had made slips in their misuse of it. The Board of Works, a typical English institution, did not refer architectural matters to architects. The rule of this country was,—and not in respect to London alone,—that architects were not referred to in architectural matters, and he wished to know the reason why. If the French system were followed here, London might become very much improved. The acquisition of a prescriptive right to light was really the outcome of the idea that neighbours should accommodate each other, but the inconvenience that arose in London from the practical application of the law of ancient lights was indescribable. It came to this, that a shopkeeper in a back street would seriously argue that his neighbour was not to be allowed to put one brick upon a fence wall without his leave; while the trouble into which neighbours got, and the hallucinations under which they suffered as regards their rights, was very great (laughter). As to an alteration of the law, the matter had been somewhat extensively discussed at the Institution of Surveyors, who had come to the conclusion that if the Law Courts would admit experts, as the law enjoined them to do, for the decision of all questions of ancient lights, there would not be so much trouble as there had been in the past.

Mr. R. Phené Spiers advised his hearers to take the earliest opportunity of visiting the church of St. Julien des Pauvres, Paris, shown on one of the plans, as it was about to be pulled down for one of the street improvements.

Mr. Thomas Blashill (Superintending Architect, Metropolitan Board of Works,) said it was extremely useful to know what was being done in important cities like Paris, but it must be remembered that the conditions were different from those of London. He believed that if the Institute were to give a decided opinion upon some of these vexed questions, it would have considerable weight outside. A great deal of work appeared to be managed in Paris by boards of officials. This bureaucratic tendency was due, he believed, to the difficulty of getting large bodies of unpaid men of intelligence to do the work. He did not think that such an arrangement would be acceptable to the people of London in the present state of public feeling. Reference had been made to the new street from Holborn Town Hall to the "Angel," but in criticising the width of it, it was hardly fair to say that a street 50 ft. wide was being made to take the traffic of one 60 ft. in width, because that was not the fact. Mr. Woodward, too, seemed to forget that the Act of George II. he had referred to had been repealed.

Mr. Woodward said he believed that this was just the point upon which lawyers differed,—

Illustrations of Mr. Walter Crane's Lecture on "Design."

whether the Act in question had or had not been repealed.

The vote of thanks on being put to the meeting was carried by acclamation,

Mr. Hooper briefly replied.

The Chairman announced that the next meeting would be held on December 17.

ARTS AND CRAFTS EXHIBITION SOCIETY:

MR. WALTER CRANE ON "DESIGN."

It is not strange that the announcement of lecture by Mr. Walter Crane should bring together a large and eager audience.

The lecturer's platform was hung round with designs bearing his characteristic impress, and in the centre was placed a large black-board.

After a short, but appropriate, introduction, Mr. Crane proceeded to lay down in clear and unaffected language the aims and limitations of decorative art.

Art, he said, had, like the shield in the fable, two sides,—the purely pictorial and the frankly decorative. In the exercise of the first the artist sought to give the effects of certain aspects of nature, with but little or no attempt at selection. An easel-picture is complete in itself. Its form and expression are entirely at the discretion of the painter, who is conditioned only by the medium in which he elects to work and the restrictions which he himself imposes. By the aid of numerous artifices he repeats the aspect of the natural world, as he sees it, and gives, with all attainable exactness, a certain number of facts,—outline, colour, rotundity, chiaroscuro, &c. He cannot give them all.

The decorative artist, on the other hand, is severely conditioned as to form, material, position, distance, &c. He works under many restraints not self-imposed or variable. His aim is the expression of another order of facts, and the attainment of ideal beauty by selection, adaptation, suggestion, suppression, exaggeration.

He gives not light and shade, but light masses and dark; and the elements with which he works are the adjustment of agreeable outline and the right balance of opposing forms. He is, before all things, guided and restrained by the material in which he works, striving to preserve its characteristics, the "agreeable bossiness" of beaten metal, the crispness of the carved wood, the effect of the plasticity of clay, and so on.

The degree of naturalism which he reaches must depend upon these. He cannot give, like the pictorial artist, the wayward growth and multitudinous leafage of the oak; but he can give other truths about it, no less interesting, which the pictorial artist does not reach,—the serration of its leaves, the structure and delicate beauty of its fruit, and the way in which the ruddy acorns are seated on their sturdy stems.

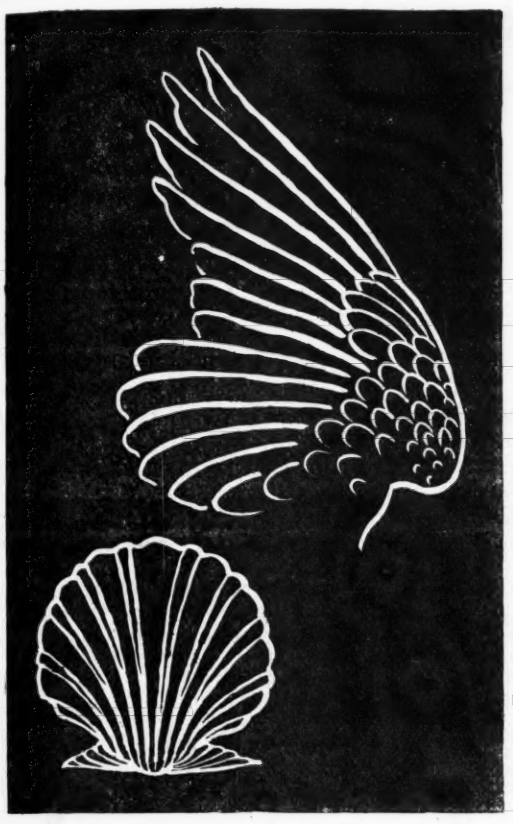
In the wisdom with which the decorative artist selects for representation such facts of nature as are decoratively effective under given conditions his success depends.

For his purpose he has all known forms at his service. The square and its allies and derivatives give him a series of almost infinite variety, and the circle and its derivatives another; and he has, moreover, inexhaustible resources in the combination and opposition of these, and in such systems as spring from alternating curves and radial lines. These latter are the most generally useful, and are found throughout all nature in the feathers of the bird's wing and the ribs of the shell, and they are alike seen in the drapery of a Greek statue and the fan-groining of a Gothic cloister.

But above and beyond all these, the designer has at his command the subtle lines of the human figure. Their play and flexibility enable him to fill spaces of every form, and by means of them he can embody his happiest thoughts.

All good art is related art, and upon the rightness of its relation the success of all decorative art depends. The Parthenon frieze remains the highest effort of man's genius as a decorative design; but if applied to the walls of Westminster Abbey all its charm would be lost.

It is the want of a sense of due relation which has heretofore degraded all previous art. To it succeeds a superficial naturalism, which is its death. By this all the ancient arts have perished, and it is to rescue contemporary art from such a fate that a strenuous effort is now being made.



Where carpets are strewn with naturalistic flowers, tied in bunches with naturalistic ribbon; where the wood-carver sets himself to emulate the fluff and feathers of a dead bird; where the tapestry-worker seeks to reproduce the effects of a landscape in oil, and where everything is striving to look like anything but what it is, the Arts and Crafts are in a bad way.

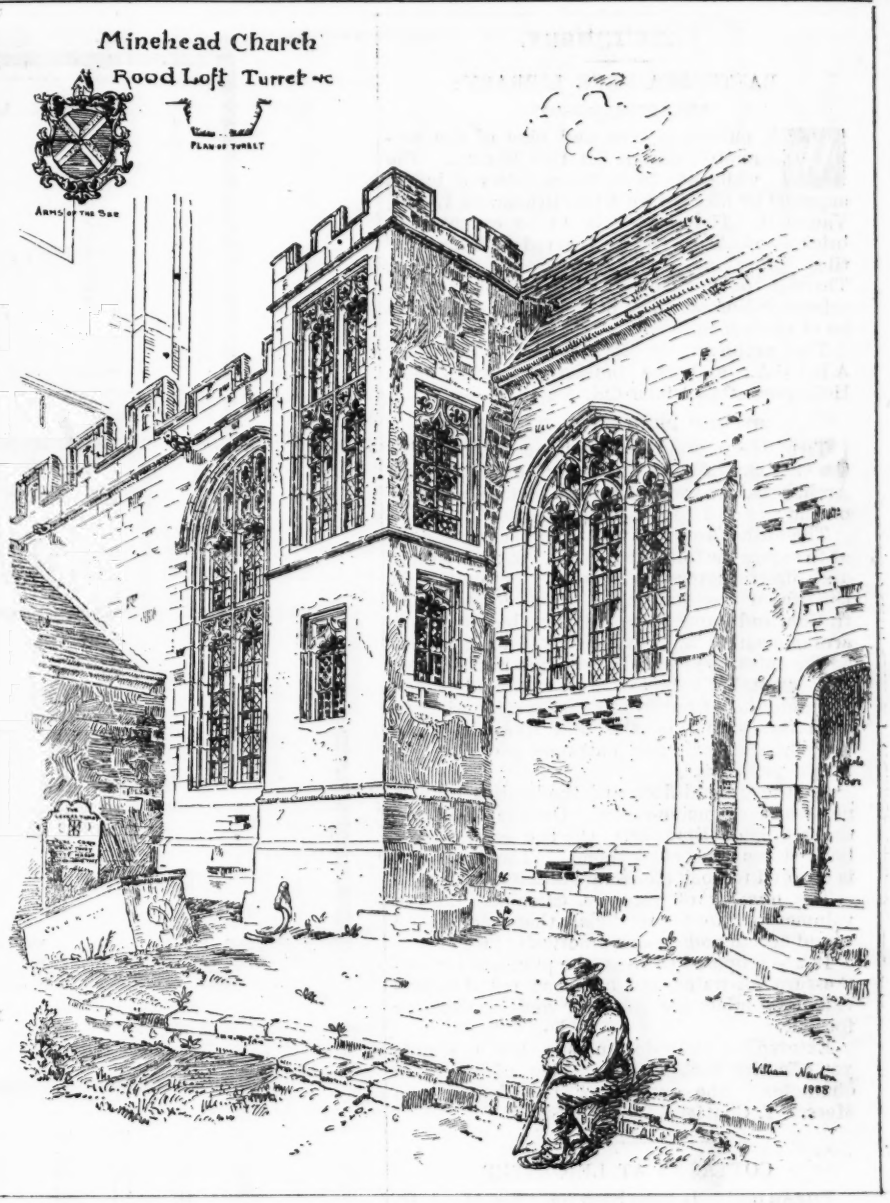
It will be gathered from the above hasty summary that there was nothing absolutely new in Mr. Crane's address. The same doctrine has been preached before. It is eminently orthodox, and, like some other orthodox doctrines, very much neglected. Mr. Crane gave new and admirable force to old views and warnings, which were, perhaps, "ne'er so well expressed"; but he did more. He accompanied his remarks by designs upon the black-board before him in illustration of his meaning, which drew from his hearers uncontrollable applause. All forms came as freely from his practised hand as the principles he enunciated flowed from his ready lips, and again and again he roused his audience to enthusiasm.

We are enabled to produce, for the benefit of those who were unable to be present, a selection of the designs used by him, but we cannot convey any adequate idea of the ease, rapidity, and grace with which similar designs were developed by him as he discoursed.

The spandrel in the left-hand top-corner of page 412 is meant to show the adaptation of the human figure to filling a space of that character. The smaller and winged figure shows another treatment. The winged figure bearing a lamp illustrates the filling of a different-shaped space. The figure in the right-hand top-corner illustrates a design for filling a square panel. The other diagrams are self-explanatory.

Society of Painters in Water-colours.—We must defer till next week any notice in detail of the admirable winter exhibition of this society, one of the best they have ever held.

Assistant Borough Surveyorship, Leicester.—The Highways and Sewerage Committee of the Borough of Leicester, at their meeting on the 30th ult., decided to appoint, subject to the approval of the Town Council, Mr. Charles Mason, Deputy Borough Engineer of Nottingham, to the post of Assistant Borough Surveyor of Leicester. Mr. Mason is an Associate Member of the Institution of Civil Engineers, an Associate of the Royal Institute of British Architects, and a member of the Council of the Nottingham Architectural Association, and has been in the service of the Nottingham Corporation for a period of eight years. There were 165 candidates for the vacancy at Leicester.



NOTES ON THE PARISH OF MINEHEAD.

THE Manor of Minehead is of very ancient origin, It is mentioned in Domesday, and was given by William the Conqueror to William de Mohun; at a later time the Manor passed from the Mohuns to the Luttrells, its present Lords, as did the adjoining Manor of Dunster. The town is divided into three parts: the upper town, composed of picturesque cottages and stepped streets leading up to the church, which is situated on the slope of a large hill called Greenaleigh or Minehead Point; the middle town, about half a mile from the beach, and the quay town by the water's edge, under the brow of the Point, which is about 700 ft. high.

The town was incorporated by Queen Elizabeth and endowed with great privileges. The quay was built in 1616 by George Luttrell, and a new head was added by Colonel Francis Luttrell in 1688.* The country on the land side, bordering as it does on Exmoor, is very beautiful, being a continued succession of lofty hills and rich vales.

The chest, illustrated in this week's issue,† is carved in high relief, as may be seen by the sections. The upper part consists of two cupboards, with a small shelf running round each; the lower part of two drawers. The bird with a book is supposed to represent an eagle, an emblem of St. John. The fish with the three stars is most likely the arms of I.M.C., whose initials are entwined in the front panel, and at whose expense the chest was probably made.

Leland says, in his "Itinerary":—

"The fairest part of the Toun standith in the botom of an hille. The residew rennith stepe up a long the hille, yn the toppe wherof is a fair Paroche Chirche."

The church is a large handsome structure, 116 ft. long and about 42 ft. wide, consisting of nave, chancel, north aisle, and a chapel, now used as the vestry. An embattled tower at the west end, 90 ft. in height, contains a peal of bells and chiming clock, a mechanical figure striking the hour. On the south side of the tower is a niche with a statue of St. Michael, to whom the church is dedicated. Behind the rood-screen in the north aisle are several chained books on a shelf, amongst which are a black letter Bible and Bishop Jewel's sermons; other objects of interest are some monumental brasses, a Jacobean pulpit, and the altar-table.

In the chancel is a tomb, said to be that of the celebrated lawyer Henry de Bracton, whose fame is principally founded on his learned treatise on the Laws and Customs of England. He flourished about 1240 A.D.* The canopy over his tomb has just been restored and replaced. About a mile from Minehead is Bratton Court, which contains some of the original wooden traceried windows. Over the principal gateway is a room called the "Judges' Chamber," which tradition says was once Bracton's study. On the north side of Bratton Hill, in a deep glen, are the ruins of what report says was once a chapel, called Burgundy Chapel, probably the ancient retreat of some recluse.

Fronting Minehead market-place is an almshouse, containing eleven dwellings, built by Robert Quirck, a great number of whose family are buried in the church. On a brass plate over the door is this inscription:—"Robert Quirck, sonne of James Quirck, built this House Anno 1630, and doth give it to the use of the poore of this parish for ever, and for better maintenance I do give my two inner cellars at the inner end of the key, and cursed be that man that shall convert it to any other use than to the use of the poore, 1630." Below is a ship engraved, and underneath:

"God's Providence
Is my Inheritance. R. Q."

The churchyard, which is entered by a stone lych-gate, contains a cross, with four steps, of the ordinary type; there is also the base and shaft of another in the town. W. N.

* Collinson's "History of Somerset."
† See lithograph plate.

* Savage's "History of Carhampton."

Illustrations.

BATTERSEA FREE LIBRARY:

SELECTED DESIGN.

WE publish a view and plan of the premiated design for this library. The walls are to be faced with red bricks supplied by Richardson & Co., Brunswick Wharf, Vauxhall. The carving is to be executed in brick also. The roofs are covered with Broseley tiles. Portland stone is used for dressings. There is to be an open-timbered roof over the reference library. The book-shelves, &c., are to be of pitch-pine.

The architect is Mr. E. W. Mountford, A.R.I.B.A., and the builder is Mr. James Holloway, of Lavender-hill.

SECOND PREMIATED DESIGN.

THIS design was prepared in accordance with the very carefully-made list of "Instructions to Architects," and was the result of careful study of the site and its special requirements.

The author's desire was to so plan each floor as to secure the following points, viz.:—1. Ample and direct ingress and egress. 2. Comfort in the use of the building. 3. Ease of administration and supervision. 4. The best sanitary arrangements. 5. Provision for future growth.

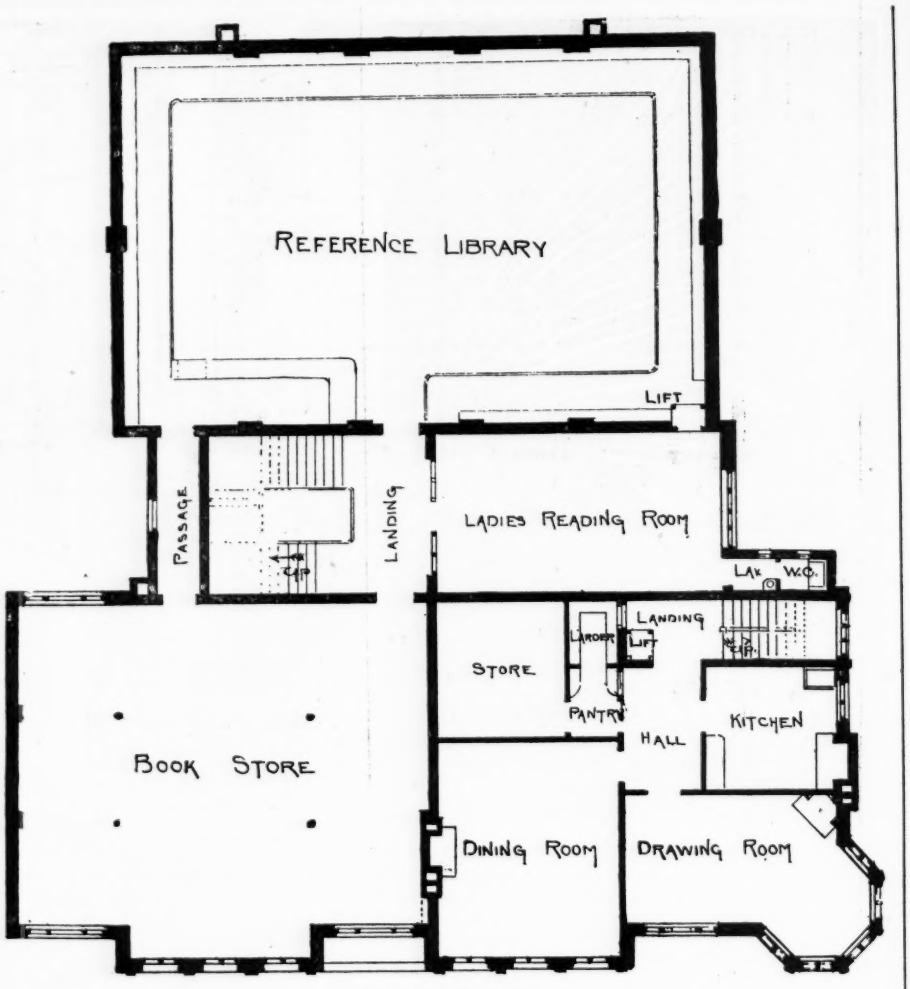
The entrances to the library, librarian's house, and caretaker's house were placed in the Lavender-hill front, by this means securing to each the benefit of the best frontage, while keeping every exit and entrance under the eye of the principal.

On the ground-floor are the lending library, news and magazine-rooms. On the first-floor, the reference libraries. On the second-floor, book stores and cloak-rooms. The basement is devoted to book stores and administration.

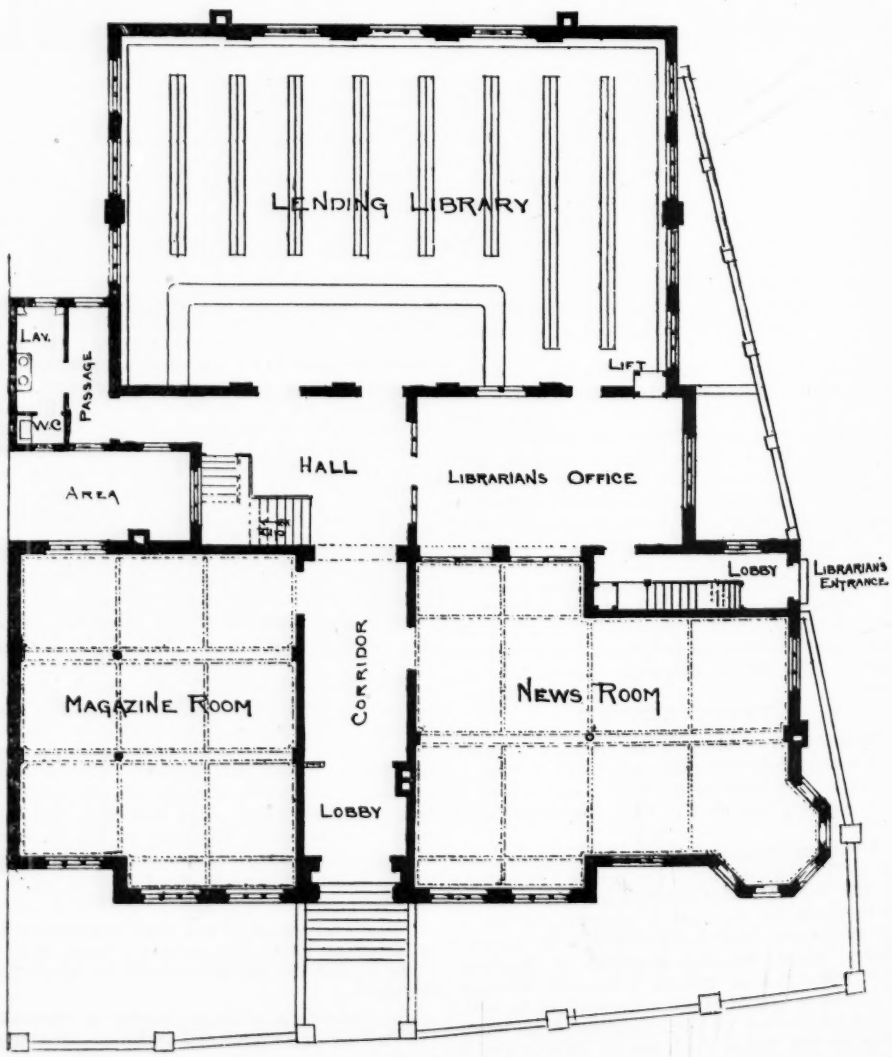
The number of volumes, calculated at ten volumes per foot superficial, that the design would accommodate was practically 110,000.

It was proposed to heat the premises by low-pressure hot water, and care was taken to provide large inlets for fresh air and extracts for foul air.

Externally, the design was for a simple yet effective building, partaking of a public character. The authors of the design were Messrs. T. Chatfeild Clarke & Son.*



FIRST-FLOOR PLAN.



GROUND PLAN.

Battersea Free Library: Selected Design—Mr. E. W. Mountford, Architect.

COTTAGES AT LEICESTER.

THESE cottages have been built for Mr. J. H. Cooper, for the accommodation of workmen, on the Saint Barnabas Estate. Each cottage has a private entrance and contains parlour, living-room, scullery, pantry, and coal-place on the ground-floor, and three bedrooms on the chamber floor. The w.c.'s and dust-bins are built away from the main buildings, adjoining the backway to the cottages. The two end cottages are larger, and contain four bedrooms each. The materials used are dark red facing bricks, and red Broseley tiles for the roof.

Mr. Isaac Barradale, F.R.I.B A., Leicester, is the architect. The illustration is taken from the drawing exhibited at the last Royal Academy Exhibition.

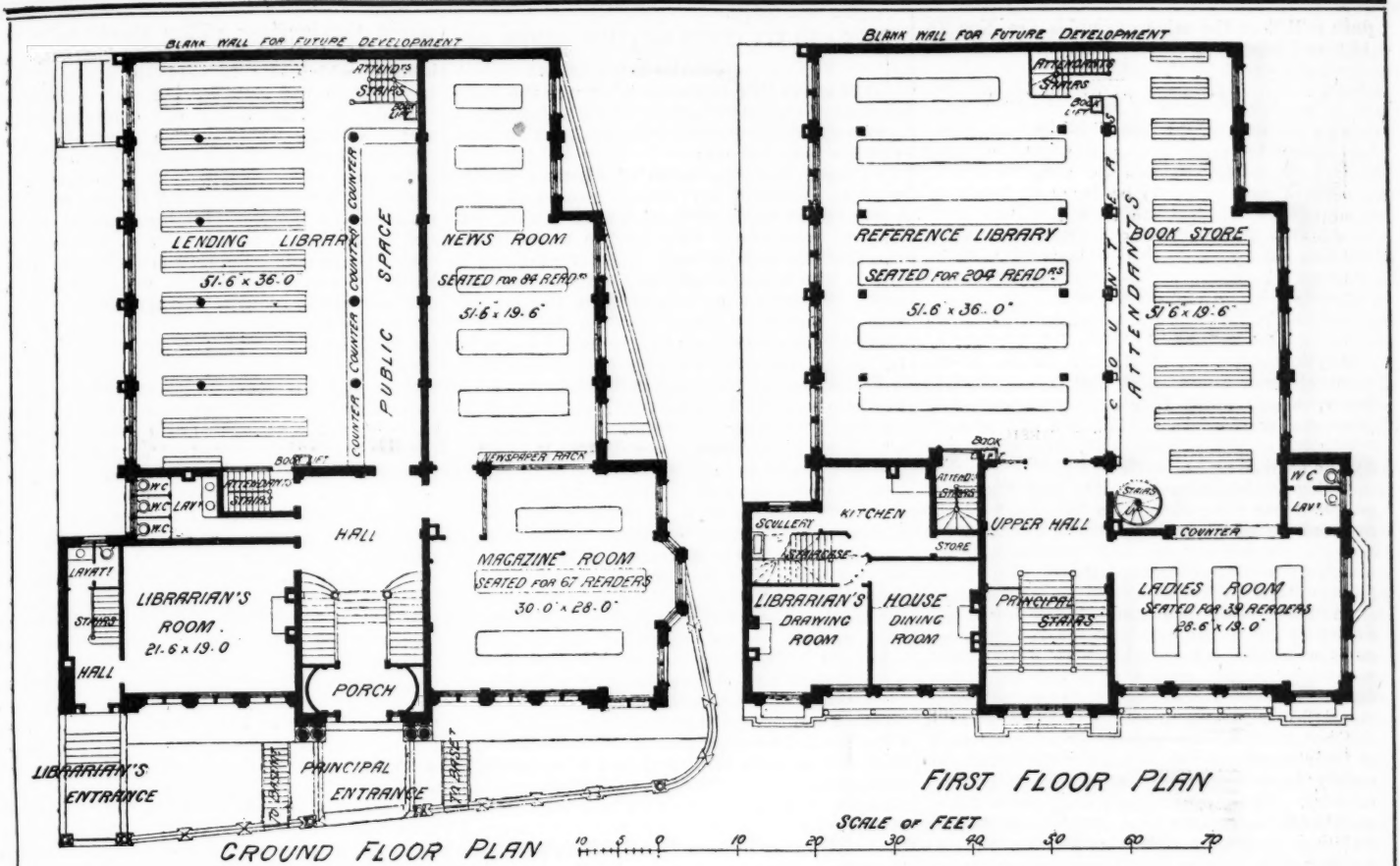
OLD COTTAGE ARCHITECTURE.—No. VIII.

THE town of Guildford is full of interesting examples of architecture. These are certainly not so imposing as at Chester and some few other towns, but they are both picturesque and of a kind likely to be particularly worth study to an architect.

The High-street is a long one, starting from the bridge over the river and mounting a steep hill, and after leaving the bottom is for a long distance broken only by very few streets. Doorways in the line of frontage admit to little narrow courts between the houses.

With a very few exceptions, the houses are all of timber, and probably date from the sixteenth, or early seventeenth, century; they have, however, been mostly refronted at a later date. At first sight this appears to have been done in brick, but a closer examination will show that the apparent brickwork is more often a coat of what is called locally "mathematical" tiling fastened over the old timber front. The high fronts also often cover low old roofs behind. The individual houses were originally of large size, and are now for the most part cut up into two or three separate shops. The shop-fronts are, as might be expected, generally modern; and the most interesting feature is the large

* A critical article on the competitive designs for this building appeared in the *Builder* on November 10 last.



Battersea Free Library: Second Premiated Design.—By Messrs. T. Chatfeild Clarke & Son.—See p. 414.

number of bow-windows, of varying design, from the seventeenth century down to comparatively modern times. A cursory glance might content one to set these down merely as picturesque, but a closer inspection will show that for delicacy of detail and accuracy of proportion they are worthy of close study, and, perhaps, are, as such, likely to be more generally useful to the architect than the more imposing and earlier timber buildings.

Although these houses may hardly seem to come under the heading of cottage architecture, it is necessary to include them in my series, in order to make complete the domestic architectural history of the district I have chosen; and, though many of those I now illustrate are later in date than I have hitherto illustrated, I am sure they will carry their own justification with them.

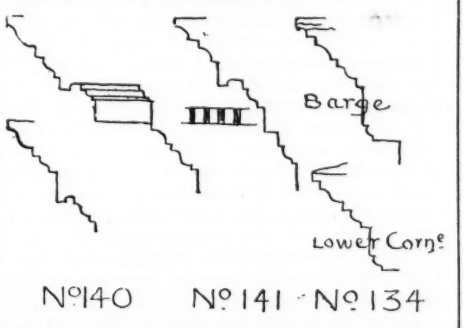
Of earlier architecture, Guildford possesses a splendid example in the Abbott's Hospital, a brick building, founded by Archbishop Abbott in the reign of James I. Besides a general propriety of design, this building has the advantage of having been very little tampered with, and possesses a series of splendid oak doors, and a very fine staircase to the warden's room. There is other interesting detail in various rooms, including the old tables and benches in the common room. This building has been for some years on the list of those suggested by the Royal Institute of British Architects as suitable for its Silver Medal Competition, and I wonder that its proximity to London has not yet induced some one to select it. The Town-hall is also an interesting timber building, well-known from numerous illustrations that have appeared. In the Council-chamber upstairs is an excellent stone mantelpiece, delicately carved with figure subjects brought from Stoughton Manor at the time of its demolition.

I do not know of much remaining inside the houses, except in that tenanted by Mr. Bull. It is probable that quantities of panelling and carved work may be concealed behind battening. A few years ago I purchased a room of good panelling with a carved Jacobean mantelpiece, which is now at Ote Hall, a house I have before alluded to. The house it came from is now pulled down.

My illustrations give, perhaps, the pick of the examples in the High-street, but there are a number of other bow-windows of excellent design.

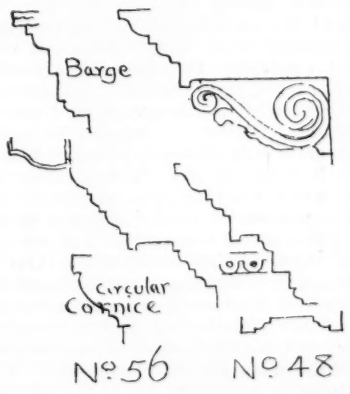
It will be seen that there are two principal varieties—those in which the windows are casements with mullions and transoms, and those of later date with sash-windows and regular Classic detail. The mullioned windows have Classic cornices, and are such as Inigo Jones himself might have designed.

I regret I cannot give measurements of the details, but the sketched profiles will give a key to those familiar with Classic detail.



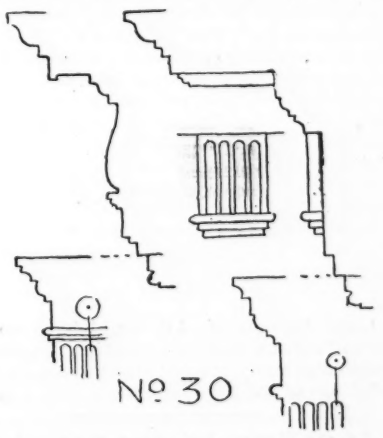
The blocked cornices on Nos. 125, 134, and 140 are similar, with a trifling difference in the lower members.

In No. 56 the semicircular bow-window and the cornice above and the sash-windows are evidently later insertions, not unpicturesque in general effect. In No. 125 I suspect the roof has originally been hipped above the top cornice, and the gable above added subsequently. The effect of the present arrangement is very good.

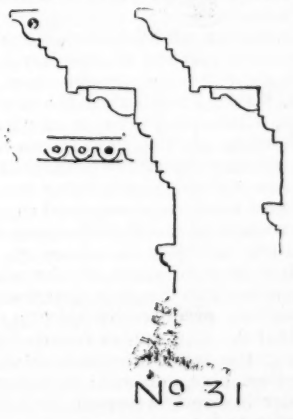


Probably of genuine Queen Anne date is No. 48; there are other varieties of this window, but without the carving.

Nos. 30 and 31 are of somewhat later date, and good examples of Classic work. In these and some of the other windows the detail is very elegant, as is usually the case when Classic details are carried out on a sufficiently small scale; it is only in cases of exaggerated size, as at the Corn Exchange, of which a corner is shown in one sketch, that the effect is tedious and wearisome. Looking at such examples as these, it is easy to see how the Classic style obtained its hold on the building world. It

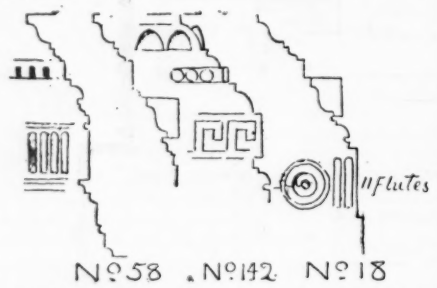


may be said, indeed, that the whole of one trade,—that of the joiner,—almost hangs on this style, which probably called him into an existence separate from the carpenter. I have always thought that one reason that the Gothic revival, in spite of the enthusiasm and talent of its directors, has failed to make a permanent



impression on our domestic architecture is the unsuitability of the style of its woodwork to the trade of the joiner, especially since machinery has come so largely to his aid. Of later

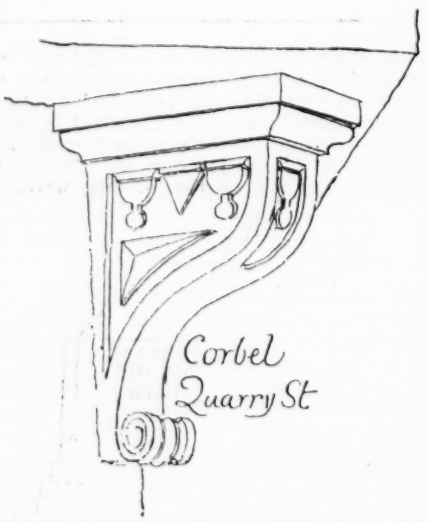
date still than the other examples are Nos. 18, 142, and 58.



Adjoining No. 30, at No. 29, is one of the most elegant ground-floor fronts of which I know, which must, I think, be at least fifty years earlier than 1834, the date of the establishment of the private bank, now taken over by the Capital and Counties Bank.

It is a satisfaction to think that Guildford people seem wise enough to be proud of the appearance of their High-street, and are not anxious to put vulgar and pretentious new buildings in place of the old, that lend such distinction to their town.

In both Guildford and Godalming there evidently existed an excellent school of joinery, as is witnessed by the character of the doors, mantelpieces, &c., and I wish one could feel that there were a chance of those concerned in the building trades devoting themselves to a diligent study of the storehouse of good work at their doors, and recovering the old traditions, rudely interrupted at the beginning of this century. The most diligent and successful of architects can have but little influence on building generally unless the trade can be awakened to a more intelligent interest in its work.



Local Schools of Art could have no more useful function than in promoting the close and systematic study of local art as shown in the old buildings of the neighbourhood. R. N.

Ascott House, Leighton Buzzard.—With reference to the illustration of this house, published in our last, Mr. H. Devey Browne writes to say that the additions to the house were designed by his late uncle, Mr. George Devey, and not by Messrs. Williams, West, & Slade, who, according to our correspondent, have merely carried out the works since Mr. Devey's death.

Phenomena of Thunderstorms.—At the first monthly meeting of the Royal Meteorological Society for the present session, Dr. W. Marcet, F.R.S., President, in the chair, Mr. G. J. Symons, F.R.S., read a paper on "Results of an Investigation of the Phenomena of English Thunderstorms during the years 1857-59." This paper was written nearly thirty years ago, but it has now been communicated to the Society at the request of the Thunderstorm Committee. The paper contains a summary, chiefly in statistical form, of some of the results of an investigation into English thunderstorms, and the accidents produced by lightning during the years 1857-9. The author found that in sheet-lightning the most prevalent colour is white, then yellow, blue, and red; in forked lightning the order is nearly reversed, blue being more than twice as frequent as any other colour, then red, white, and most rarely yellow. Sheet lightning was seen about twice as often as forked.

THE CULTIVATION OF THE SENSE OF BEAUTY.

THE above title expresses what was the main purport of the latter portion of Sir F. Leighton's opening address at the Liverpool Art Congress, which was as follows:—

"I said that the sense of abstract beauty with the mass of our countrymen—and once again I must be understood not to ignore, but only to leave out of view for the moment, the considerable and growing number of those in whom this sense is astir and active—with the mass, I repeat, of our countrymen, the perception of beauty is blunt, and the desire for it sluggish and superficial; with them the beautiful is, indeed, sometimes a source of vague, half-conscious satisfaction, especially when it appeals to them conjointly with other incitements to emotion, but their perception of it is passive, and does not pass into active desire; it accepts, it does not demand; it is uncertain of itself, for it lacks definiteness of intuition, and, having no definite intuition, it is necessarily uncritical. This weakness, among the many, of the critical faculty in æsthetic matters, and the curious bluntness of their perceptions, is seen not in connexion with the plastic arts only, but over the whole artistic field—in the domains of music and the drama, as in that of painting and sculpture. Who, for instance, where a body of English men and women has been gathered together in a concert-room, has not, at one moment heard a storm of applause go up to greet some matchless executant of noble music, and then, five minutes later, watched in wonder and dismay the same crepitation of eager hands proclaiming an equal satisfaction with the efforts of some feeblest servant of Apollo? Or have you not often, in your theatres, blushed to see the lowest buffoonery received with exuberant delight by an audience,—and a cultivated audience,—which had just before not seemed insensible to some fine piece of histrionic art? And what could proclaim the lack of true, spontaneous instinct in more startling fashion than the notorious fact that the most thrilling touch of pathos in the performance of an actor reputed to be comic will be infallibly received with a titter by a British audience, which has paid to laugh and come to the play focussed for the funny? Now this little glimpse into the attitude of the public in regard to other arts than ours has its bearing upon our present subject. This same feebleness of the critical sense which arises out of the indefiniteness,—to say the best of it,—of the inner standard of artistic excellence, is not unnaturally accompanied by and fosters an apathy in regard to that excellence, and an attitude of callous acquiescence in the unsightly, which are inexpressibly mischievous; for you cannot too strongly print this on your minds, that what you demand, that you will get, and according to what you accept will be that which is provided for you. Let an atmosphere be generated among you in which the appetite for what is beautiful and noble is whetted and becomes imperative, in which whatever is ugly and vulgar shall be repugnant and hateful to the beholder, and assuredly what is beautiful and noble will, in due time, be furnished to you, and in steadily increasing excellence, satisfying your taste, and at the same time further purifying it and heightening its sensitiveness. The enemy, then, is this indifference in the presence of the ugly; it is only by the victory over this apathy that you can rise to better things; it is only by the rooting out and extermination of what is ugly that you can bring about conditions in which beauty shall be a power among you. Now, this callous tolerance of the unsightly, although it is, I am grateful to think, yielding by degrees to a healthier feeling, is still strangely prevalent and widespread among us, and its deadening influence is seen in the too frequent absence of any articulate protest of public opinion against the disfigurement of our towns. Let me give you an instance of this indifference. Our country is happy in possessing a collection of paintings by the Old Masters of exceptional interest and splendour, a collection which, thanks to the taste and highly-trained discernment of its present accomplished head—Sir Frederick Burton—is, with what speed the short-sighted policy of successive Governments permits, rising steadily to a foremost place among the famous galleries of the world. Some years ago the building destined to receive it being found no longer adequate, it became necessary to provide by some means ampler space for the display of the national treasure. It was resolved that another edifice should take the place of that designed by Wilkins, an edifice which, be it said in passing, had been made the butt of curiously unmerited ridicule in the world of connoisseurship, and which, apart from certain very obvious blemishes, it has always seemed to me to be much easier to deride than to better. A competition was opened, and designs were demanded for a spacious building, equal to present and future needs, and worthy of the magnificence of the collection it was to house. It is hardly necessary to say that we have here no concern whatever with the controversy which arose over these designs. My concern is with its final outcome, which is this: the original building has remained unaltered as to its exterior; but on the rear of one of its flanks loom now into view, first an appendage in an entirely different style of architecture, and, further on, an excrescence of no style of architecture at all, the one an Italian tower, the other a flat cone of glass, surmounted by a ventilator—a structure of the warehouse type—the whole resulting in a jarring jumble and an aspect of chaotic incongruity which would be ludicrous if it were not distressing; and we enjoy, further, this instructive phenomenon—that a public opinion which sensitively shrank from the blemishes of the original edifice has accepted its retention, with all those blemishes unmodified, *plus* an appendage which adds to the whole the worst, almost, of all sins architectural—a lack of unity of conception. Now, I have never to my knowledge heard one single word of articulate public reprobation levelled at this now irremediable blot on what we so complacently call the finest site in the world; and yet I cannot find it in me to believe that many have not, like myself, groaned in spirit before a spectacle so deplorable—a spectacle which, indeed, is only conceivable within these islands. I think that a good deal is summed up in this episode, and I need not, for my present purpose, seek another in the domain of architecture. In regard to sculpture, the public apathy and blindness are yet more depressing and complete, and illustrate the deadness of the many to the perception of the essential qualities of art. To the overwhelming majority of Englishmen sculpture means, simply, the perpetuation of the form of Mr. So-and-So in marble, bronze, or terra-cotta,—this, and no more. That marble, bronze, or terra-cotta may, under cunning hands, become vehicles, for those who have eyes to see, of emotions, æsthetic and poetic, not less lofty than those which are stirred in us by the verse of a Dante or a Milton, or by the strains of noblest music,—of this, the consciousness is for practical purposes non-existent. For sculpture, for an art through which, alone, the name of Greece would have been famous for all time, there is, outside portraiture, even now, under conditions admittedly improved, little or no field in our country. Portrait-statutes, galore, bristle, indeed, within our streets; but the notion of setting up in public places pieces of monumental sculpture solely for adornment and dignity, or of monuments that shall remind us of deeds in which our country or our town has earned fame and deserved gratitude, and incite the young to emulation of those deeds, or that shall be the allegorised expression of any great idea,—and yet our race has had great ideas, and clothed them in deeds as great,—hardly ever, it would seem, enters the heads of a people whose aspirations are surely not less noble or less high than those of other nations. Nay, even a monument commemorative of the great public services of some individual man which shall be a monument *to* him rather than exclusively an image *of* him, a monument, of which his effigy shall form a part, but of which the main feature shall be the embodiment or illustration, in forms of art, of the virtues that have earned for him the homage of his countrymen,—even this is suggested in vain. And if we are tolerant of treason against fitness in architecture, what shall we say of our tolerance in regard to its sculptural adornments? What shall we say of the complaisant acceptance, above and about windows and doorways in clubs, offices, barracks, and the like buildings, of carven wonders such as no civilised community would accept in silence? Though I fear I must here, with all deference, add that my brethren, the architects, who suffer their work to be so defaced, are themselves not wholly blameless; and, indeed, it is a truth, in the assertion of which the most enlightened workmen in every branch of art will stand by me, that among ourselves also the sense of the kinship of the arts is too often a mere theory,

received, no doubt, with respect as an abstract proposition, but not perceptibly colouring our practical activity. In sculpture the inertness of demand and tolerance of inferior supply is due mainly to the want, to which I have alluded, of a sense of and a joy in the purely æsthetic quality in artistic production, an insensibility to the power inherent in form, by its own virtue, of producing emotion and exciting the imagination,—a power on which the dignity of this pure and severe art does or should mainly rest. In the appreciation of painting, which, on various grounds, appeals as an art to a far wider public than either architecture or sculpture, the same shortcomings are evident, though in a less degree, and with less mischievous results; for the witchery of colour, at least, is felt and appreciated, more or less consciously, by a very large number of people. The inadequacy of the general standard of artistic insight is here seen in the fact that, to a great multitude of persons, the attractiveness of a painted canvas is in proportion to the amount of literary element which it carries, not in proportion to the degree of æsthetic emotion stirred by it, or of appeal to the imagination contained in it,—persons, those, who regard a picture as a compound of anecdote and mechanism, and with whom looking at it would seem to mean only another form of reading. Time after time, in listening to the description, the enthusiastic description, of a picture, we become aware that the points emphasised by the speaker are such as did not specially call for treatment in art at all, were often not fitted for expression through form or colour, their natural vehicle being not paint but ink, which is the proper and appointed conveyer of abstract thoughts and concrete narrative. I have heard pictures extolled as works of genius simply because they expressed, not because they nobly clothed in forms of art, ideas not beyond the reach of the average penny-a-liner. Now, I know that in what I am here saying I skirt the burning ground of controversy long and hotly waged,—skirt it only, for that controversy touches but the borders of my subject, and I shall, of course, not pursue it here. I will, nevertheless, to avoid misrepresentation in either sense, state, as briefly as I can, one or two definite principles on which it appears to me safe to stand. It is given to form and to colour to elicit in men powerful and exquisite emotions,—emotions covering a very wide range of sensibility, and to which they alone have the key. The chords within us which vibrate to these emotions are the instrument on which art plays; and a work of art deserves that name, as I have said, in proportion as, and in the extent to which, it sets those chords in motion. The power and solemnity of a simple appeal of form as such is seen in a noble building of imposing mass and stately outlines. When, however, form in art is connected with the human frame, and when combinations of human forms are among the materials with which a beautiful design is built up, then another element is added to the sum of our sensations,—an element due to the absorbing interest of man in all that belongs to his kind; and the emotion primarily produced by the force of a purely æsthetic appeal is enhanced and heightened by elements of a more intimate and universal order, one more nearly touching our affections, but not, therefore, necessarily of a higher order. Thus the episode, for instance, of Paolo and Francesca, clothed in the rare, grave melody of Dante's verse, entrances us with its pathos; but our emotion, intensely human as it is, is not therefore of a higher kind than that which holds us as we listen to sounds sublimely woven by some great musician; nor are the impressions received in watching from the floor of a great Christian church the gathering of the gloom within a great dome's receding curves of less noble order than those aroused by a supreme work of sculpture or of painting—by, say, the 'Notte 'of Michel Angelo or the 'Mona Lisa' of Lionardo; and yet in both of these last the chord of human sympathy is strongly swept, though in different ways—in the 'Notte' by the poetic and pathetic suggestiveness of certain forms and movements of the human body; in the 'Mona Lisa' by a more definitely personal charm and feminine sorcery which haunts about her shadowy eyes, and the subtle curling of her mysterious lips. I say, then, that in a work of art the elements of emotion based on human sympathies are not of a loftier order than those arising out of abstract sublimity or loveliness of form, but that the presence of these elements in such a work, while not raising it as an artistic creation, does impart to it an added power of appeal, and that, therefore, a work in which these elements are combined will be with the great majority of mankind a more potent engine of delight than one which should rest exclusively on abstract qualities. And it follows, therefore, that while a work of art earns its title to that name on condition only, once again I say, of the purely æsthetic element being present in it, and will rank as such in exact proportion to the degree in which this element prevails in it; and while, further, this element, carrying with it, as it does, imaginative suggestiveness of the highest order and of the widest scope, is all sufficient in those branches of art in which the human form plays no part, the element which is inseparable in a work of art from the introduction of human beings is one which it is not possible for us to ignore in our appreciation of that work as a source and vehicle of emotion. Every attempt at succinct exposition of a complex question risks being unsatisfactory and obscure, and I am painfully alive to the inadequacy of what I have just said. I trust, however, that I have conveyed my meaning, if roughly, yet sufficiently to shield me from misconception in regard to the special emphasis I am laying on the importance of a proper estimation of the essentially æsthetic quality in a work of art,—an importance which I urge upon you not so much here on account of the effect its absence may have exercised on the development of painting, as on account of the significant fact that its want,—the lack of a perception that certain qualities are the very essence of art, and link into one great family every work of the hands of men in which they are found,—has led with us to a disastrous divorce between what is considered as art proper and the arts which are called industrial. I say advisedly 'disastrous,' for the lowering among us in the present day of the status of forms of art in the service of which such men as Albert Dürer, for example, and Holbein (men, by the bye, of kindred blood with ourselves), Cellini, and Lionardo, were glad to labour and create,—and that not as a concession, but in the joyful exercise of their fullest powers,—is one of its results, and carrying with it, as is natural, a lowering of standard in these arts, has generated the marvellous notion, not expressed in words, but too largely acted on, that art in any serious sense is not to be looked for at all in certain places,—where, in truth, alas? neither is it often found,—and led to the holding aloof to a great extent, until comparatively recent years, of much of the best talent from very delightful forms of artistic creation, and this notion has led further to the virtual banishment from certain provinces of designing of the human figure, or, where it is not banished, to its defacement, too often, in the hands of the untrained or the inept. We are to a wonderful degree creatures of habit, our thoughts are prone to run,—or shall I not rather say to stagnate?—within grooves; and, if we are a people of many and of great endowments, a swift and free play of thought is, as we have been forcibly told by a voice that we shall hear no more,—and can ill miss,—not a distinguishing feature among us. Is it not an amazing thing, for example, that human shapes, which in clay or plaster would be ignominiously excluded from a second-rate exhibition, are not only accepted, but displayed with a chuckle of elated pride, when cast in the precious metals, flanked, say, by a palm-tree, borne aloft on a rock, and presented in the guise of a piece of ornamental plate? But is this even rare? Is it not of constant occurrence? Do you demur? Well, let me ask you a plain question: Of all the nymphs and goddesses, the Satyrs and the Tritons, that disport themselves on the ceremonial goldsmithery of the United Kingdom, how many if cast in vulgar plaster and not in glittering gold would pass muster before the jury of an average exhibition? and if few, I ask why is this so? In the name of Cellini—nay, in the name of common sense, why? and is it on account of the low ebb of figure modelling for decorative purposes that on our carved furniture,—what we mysteriously describe as "art furniture"—the human form is hardly ever seen? Then why is the best talent not enlisted in this work? Certain it is that the absence of living forms imparts to much of the furniture now made in England, unsurpassed as it is in regard to delicacy and finish of handiwork, and frequently elegant in design, a certain look of slightness and flimsy, faddy dilettantism which prevents it from taking that rank in the province of applied art to which it might and should aspire. But I have, I fear, already unduly drawn upon your patience, and I must bring to a close these too disjointed prefatory words, leaving it to the accomplished gentlemen who head the various sections of this Congress to amplify and enrich as they will, out of the wide fund of their knowledge and experience, the bald outline I have sketched before you. They, in their turn, taking up, no doubt, our common parable, will emphasise and press on you the fact that by cultivating its æsthetic sense in a more comprehensive and harmoniously consistent spirit than hitherto, and with a clearer vision of the nature of all art and a more catholic receptiveness as to its charms, and by stimulating in a right direction the abundant productive energy which lies to its hand, this nation will not only be adding infinitely to the adornment and dignity of its public and private life, not only providing for itself an increasing and manifold source of delight and renovating repose, mental and spiritual, in a day in which such resting and regenerating elements are more and more called for by our jaded nervous systems, and more and more needed for our intellectual equilibrium, but will be dealing with a subject which is every day becoming more important in relation to certain sides of the waning material prosperity of the country. For, as they will no doubt remind you, the industrial competition between this and other countries,—a competition keen and eager, which means to certain industries almost a race for life,—runs, in many cases, no longer exclusively or mainly on the lines of excellence of material and solidity of workmanship, but greatly nowadays on the lines of artistic charm and beauty of design. This, to you, vital fact is one which they will, I am convinced, not suffer to fall into the background. One last word in anticipation of certain objections not unlikely to be raised against an assumption which may seem to be implied in the existence of our Association,—the assumption that the evils and shortcomings of which I have spoken with such unsparing frankness can be removed or remedied by the gathering together of a number of persons to listen to a series of addresses. The causes of these evils, we may be told, and their antidote, are not on the surface of things, but rest on conditions of a complex character, and are fundamental. 'Who,' I hear some one say, 'is this dreamer of dreams, who hopes to cure by talking such deep-seated evils? Who is this shallow and unphilosophical thinker who does not see that the same primary conditions are operative in making the purchaser indifferent to what he gets and the supplier indifferent to what he produces, and who attributes the circumstance that good work is not generally produced in certain forms of industry to the lack of demand, rather than to the deeply-lying fact that suppliers and demanders are of the same stock, having the same congenital failings, and satisfied with the same standards?' My answer to this imaginary, or, I ought, perhaps, to say this foreseen, objector would be, firstly, this,—that I am not the visionary for whom he takes me, and that I do not believe in the efficacy of words either directly to remedy the state of things I have been deploring, or to create a love of art and a delicate sensitiveness to its charms in those to whom the responsive chords have been refused; neither is the eloquence trumpet-toned and triumphant, conceivable by me before which the walls of the Jericho of the Philistines shall crumble in abrupt ruin to the ground; least of all do I believe in sudden developments of the human intellect. But it has, nevertheless, seemed to me, as it has seemed to the framers of this Association, that words, if they be judicious and sincere, may rally and strengthen and prompt to action instincts and impulses which only await a signal to assert themselves,—instincts sometimes, perhaps, not fully conscious of themselves—and that a favouring temperature may be thus created within which, by the operation of natural laws, in due time, but by no stroke of the wand, a new and better order may arise. Neither, indeed, do I ignore the force of my critic's contention that the causes of mischief lie deep, and are not to be touched by surface-tinkering, if they are to be removed at all; though I demur to his pessimistic estimate of them as a final bar to our hopes. It is true that certain specific artistic attributes are, or seem to be, feeble in our race; it is true, too true, that the general standard of taste is low; it is true, too true—I have it on the repeated assurance of apologetic vendors—that with us the ugliest objects—often, oh! how ugly—have

the largest market; nevertheless, the amount of good artistic production in connexion with industry—I purposely speak of this first—has grown within the last score or so of years, and through the initiative, mind, of a mere handful of enthusiastic and highly-gifted men, in an extraordinary degree; and in a proportionate degree has the number increased, also, of those who accept and desire it; and this growth has been steady and organic, and is of the best augury. Now, the increase in the number of those who desire good work, and the concurrent development of their critical sensitiveness in matters of taste, stimulate, in their turn, the energies, and sustain the upward efforts, of the producers, and thus, through action and reaction, a condition of things should be slowly but surely evolved which shall more nearly approach that general level of artistic culture and artistic production so anxiously looked for by us all. It is in the hastening of this desired result that we invoke, not your sympathy alone, but your patient, strenuous aid. And if I am further asked how, in my view, this association can best contribute to the furtherance of our common end, I would say, not merely by seeking to fan and kindle a more general interest in the things of art, but mainly by seeking to awaken a clearer perception of the true *essence* of a work of art, by insisting on the fundamental identity of all manifestations of the artistic creative impulse, through whatever channels it may express itself, and by setting forth and establishing this pregnant truth—that whatever degrees of dignity and rank may exist in the scale of artistic productions, according to the order of emotion to which they minister in us, they are one in kind; for the various and many channels through which beauty is made manifest to us in art are but the numerous several stops of one and the same divine instrument. And if in what I have said I have laid especial stress on that branch of art which is called industrial, it is not solely to develop this cardinal doctrine, neither only because of the pressing, practical, paramount national importance of this part of our subject, but also because I, in truth, believe that it is in a great measure through these very forms of art that the improvement, to which I look with a steadfast faith, will be mainly operated. The almost unlimited area which they cover in itself constitutes them an engine of immense power, and I believe that through them, if at all, the sense of beauty and the love for it will be stimulated in, and communicated to, constantly increasing numbers. I believe that the day may come when public opinion, thus slowly but definitely moulded, will make itself loudly heard; when men will insist that what they do for the gracing and adornment of their homes shall be done also for the public buildings and thoroughfares of their cities; when they will remind their municipal representatives and the controllers of their guilds of what similar bodies of men did for the cities of Italy in the days of their proud prosperity in trade, and will ask why the walls of our public edifices are blank and silent, instead of being adorned and made delightful with things beautiful to see, or eloquent of whatever great deeds or good work enrich and honour the annals of the places of our birth. And, lastly, I believe that an art desired by the whole people and fostered by the whole people's desire would reflect,—for such art must be sincere,—some of the best qualities of our race: its love of Nature, its imaginative force, its healthfulness, its strong simplicity."

THE ARCHITECTURAL ASSOCIATION:

IRISH ARCHITECTURE.

The fourth meeting of this Association for the present session was held on the 30th ult., at 9, Conduit-street, Mr. Herbert D. Appleton (President) in the chair.

The following new members were elected, viz.:—Messrs. G. D. Curtis, J. P. Coope, A. C. Breden, T. P. Simpson, S. W. Cranfield, H. T. Cooper, G. H. C. Cole, H. J. Potter, R. Savage, E. J. Wellman, C. F. Devitt, J. L. Williams, W. L. Lucas, W. H. Barton, T. Jenner, S. Gluckstein, J. E. Capell, M. J. Calligan, H. A. Dives, H. C. M. White, N. Vaughan, W. H. Finch, E. B. Wetenhall, J. S. Millbourne, W. Stainer, H. J. Gamble, and C. S. Stone.

The Chairman announced that, with regard to the affiliation of the Birmingham Association and the Glasgow Association, the negotiations were not quite completed, and that the matter stood over to the next meeting.

Mr. J. L. Robinson, A.R.H.A., then gave a lecture entitled "The Development of Irish Architecture from the Early Keltic work to the Eighteenth Century."

The lecturer made the following introductory remarks:—

Although the remains of ancient architecture now existing in Ireland are few in number and singularly devoid of detail, yet a great amount of interest attaches to them as records of the condition of the country at different periods of its history.

The sepulchral tumuli which abound are the only evidence which now exists of the Tuatha de Danaans, a race which inhabited Ireland until the invasion of the Milesians about 1000 B.C. Some of these tumuli, which are scattered along the banks of the river Boyne, from Drogheda to Slane, are of large size. The most notable is New Grange, an artificial mound covering a long passage of upright stones, with lintels over, leading to a cruciform chamber, about 30 ft. high. Some of the stones composing the passage, and those at the entrance, are covered with ornament of the simplest character, such as lozenges, zig-zags, and concentric circles. The mound at New Grange is surrounded by a circle of monoliths, placed at equal distances apart. The entire internal arrangement of this tumuli bears some resemblance to the pyramids of Egypt. Cromlechs are also very plentiful, as well as stones with Ogham inscriptions, which consist of notches cut on the edges of the stones.

It is probable that with very few exceptions timber formed the principal material used in the construction of dwellings until a comparatively recent period. The earliest examples of masonry are of a Cyclopean character, the stones used being of large size, closely fitted together, and the doors and windows have sloping jambs and lintels over.

Some of the churches at Glendalough and Clonmacnoise partake of this character.

In the West, rude huts of dry masonry, like beehives, are to be seen, which were used as dwellings by hermits in early Christian times.

In Killiney Church, a small building attributed by Petrie to the sixth century, is an Etruscan door with a Greek cross cut in relief on the soffit of the lintel. There are several examples of stone-roofed churches or houses, the best known being St. Columba's house, at Kells; St. Kevin's house at Glendalough, and Cormac's Chapel at Cashel.

The development from the lintel is easily traced; first, the lintel is scooped out to form an arch over the open, then the arch is formed of three stones, and later on many stones are used. In the same way the earlier doors and windows have square jambs without ornament, then a fillet was worked on the edge, or bead, and by degrees the ornament developed until it culminated in the beautiful and distinctive ornament to be seen at Ardfert, Glendalongh, Clonmacnoise, Cashel, &c. The great peculiarity of Irish, that is, pre-Norman, architecture is the large use of interlaced ornament, which was carried, at the same time, to such perfection in metal work and in illuminated manuscripts. The same ornament occurs in the doors, &c., of the later round towers, and forms the principal decoration of the crosses.

Some attention has lately been bestowed on the fact that large numbers of crosses, or rather fragments of crosses, covered with interlaced ornament, are to be found in Scotland and the Midland Counties. This is easily accounted for by the fact that, from the sixth to the tenth centuries, when the entire of Europe was overrun by barbarians, Ireland kept alight the lamp of learning and Christianity, and sent her missionaries to all parts of the world, whilst the noblest families of Europe sent their sons to be educated at the renowned colleges of Ireland. Hence the missionaries brought artificers and their art along with them, and their Keltic ornament is to be traced at Iona, Lindisfarne, through England, Normandy, Switzerland, and many other parts of Europe.

The Round Towers are, I may say, peculiar to Ireland, and have given rise to several theories about their origin. Some say they were built by the Phœnicians, others by the Danes, or by the Fire-worshippers, or that they were Buddhist temples. Dr. Petrie was the first to show that they were decidedly of Christian origin, by analysing each theory and exposing its weak points and contradictions. He also proved that they are never found unconnected with ancient ecclesiastical foundations; that their architectural styles exhibit no features or peculiarities not found in the *original* churches with which they are locally connected, when such remain; that on several of them Christian emblems are observable, and others display in the details a style of architecture universally acknowledged to be of Christian origin; and finally, that they possess, invariably, architectural features not found in any building in Ireland ascertained to be of Pagan times. He then proves that they were used as belfries and watch-towers, and also as places of refuge in times of danger, the doors being placed at such a height from the ground as to favour such a theory, which is supported by the many entries in the Irish annals of forays by the Danes on the churches, and that the clergy took refuge in the Cloictheagh, a round tower. The crosses are also almost peculiar to Ireland. Several of them are covered with figures representing Scripture subjects, the Last Judgment often appearing at the junction of the arms around the crucifixion. The old churches are all of very small size, the cathedral at Glendalough measuring 37 0 × 55 ft. in length. The development of the ornament is easily traced in the different examples which still exist. King Cormac's chapel at Cashel, which was finished in the year 1134, is the latest and most ornate example of the style. All the arches are semicircular, the piers or pilasters square and covered with ornament, and the roof a barrel vault with ribs dividing each bay. There is no doubt that but for the Anglo-Norman invasion there was every probability of the development of a style of architecture differing in material respects from the rest of Europe.

The architectural result of the Anglo-Norman invasion was that the invaders imported their notions of architectural taste with them, and all subsequent buildings in Ireland show similar detail to English architecture; but owing to the hardness of the building stones and the poverty and unrest of the country, the detail is generally poor and the mouldings few and shallow. All the abbeys and churches were built so as to stand a siege, and some of them differ little in appearance from feudal castles.

Notwithstanding the change in architectural style, it is surprising that the interlaced ornament still survives, and is to be seen in the capitals at Jerpoint Abbey, and in the masons' marks at Cashel, Holy Cross, and many other buildings down to the sixteenth century. The fifteenth century must have been a very flourishing time for the building trade, as most of the abbeys which now stand,—whether in ruins or not,—show details of that period. Any Elizabethan work is generally poor, and the only details are large mullioned windows. During the eighteenth century, and particularly during its last eighteen years, a large number of public buildings were erected in Dublin in the Classic style. The Parliament House, Four Courts, and Custom House, are buildings of which any city may be proud.

The above remarks are merely introductory, as I now intend to exhibit a number of photographs done by myself of buildings from the earliest periods, and trust that you will excuse any shortcomings in the views, as, being only an amateur, my work will not bear comparison with that of men who devote themselves wholly to it as a pursuit.

Mr. Robinson then, by means of the limelight, exhibited a fine collection of 106 photographs taken by himself. The first showed a cromlech, supposed to have been erected about 600 B.C., and which was similar to those found in Brittany. This was followed by a view of the entrance to the tumulus at New Grange, the passage and internal chambers of which are comprised of large stones, with slabs laid across. A very fine selection of Keltic crosses were shown, notably those of Clonmacnoise, a great seat of learning in early times; of St. Columba, Kells; of Castledermot, made of granite, and showing the interlacing ornament; and that of Tuam, a tall cross, having sockets at the base. One cross at Monasterboice, stands 25 ft. high, and several of the crosses have panels with various Christian subjects. Mr. Robinson compared these Irish crosses with a fragment of a cross found at Leek, Staffordshire, which showed the interlacing ornament, the same ornamentation being also found in the porch of Bakewell Church. Some interesting views of Round Towers were also exhibited, notably that of Swords, dating back to A.D. 512. The doors of these towers had been a considerable height from the ground, showing that they were used as places of refuge. Several of the towers were shown built in and incorporated with churches, the early ones being constructed

of rubble, and the later ones of ashlar. Mr. Robinson exhibited a drawing of the Round Tower at Brechin, taken from the *Builder*, which showed its great resemblance to the Irish towers, and pointed to the fact that they were built by kindred peoples. Then followed some excellent views of the valley of Glendalough, with the remains of its towers and churches. The early churches and oratories were extremely small, that on the Hill of Howth being only 8 ft. wide and 14 ft. in length. The detail of the arches of these small churches was explained, the interlacing ornament being carried into everything. When the Anglo-Normans conquered Ireland, they, of course, brought their own style of architecture with them, King John's Castle at Trim being similar to Rochester, Norwich, and other castles erected at the same period. Some examples of the fortified abbeys were shown, with small cloister garths, partaking of the character of the cloisters of Spain and Italy. Several photographs were shown of Jerpoint Abbey founded by O'Donoghoe, King of Ossory, in 1180, of the Cistercian Abbey of Mellifont, founded in 1142, by Devorgilla, and of St. Francis' Abbey, now converted into a brewery. These were followed by views of St. Patrick's and Christ Church Cathedrals. Mr. Robinson then dwelt at some length on Irish domestic architecture, showing some old buildings in Kilkenny, Tuam, and other towns, and several of the old and picturesque, though dirty, streets in the vicinity of St. Patrick's Cathedral, Dublin. Many of the old houses, now removed, were of brickwork of Flemish character. The lecturer concluded by exhibiting some examples of the Dublin buildings of the Classic period, including Trinity College, the Four Courts, the Bank of Ireland, and the Custom House.

The Chairman, at the conclusion of the lecture, proposed a vote of thanks to Mr. Robinson, to whom he said they owed a deep debt of gratitude for preparing the photographs, and coming from Dublin to exhibit them (applause).

The motion having been seconded, it was carried by acclamation.

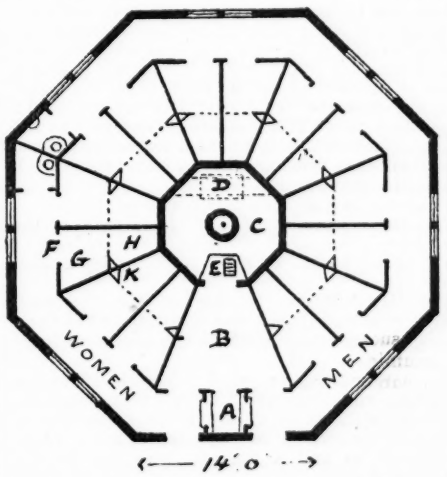
Mr. Robinson briefly replied, and the proceedings terminated.

THE CULTS AND MONUMENTS OF ANCIENT ATHENS.

THE fifth and last lecture, delivered on November 30, was concerned with the Street of Tombs of Athens. Miss Harrison began by showing from illustrations the various stages of a Greek burial—the *πρόθεσις*, or lying-in-state of the dead man; the *ἔκφορα*, or carrying out of the body, when he was borne to his last resting-place in the Outer Kerameikos, just outside the Dipylon Gate. Many of the tombs are still on the actual spot where they were erected; many more are in the Museum at Athens, or in different collections in Europe. We are struck, in the majority of the Athenian grave-reliefs, with the resemblance which they bear in treatment and technique to the Parthenon marbles. One probable theory to account for this is that after the building of the Parthenon many of the workmen were employed in sculpturing reliefs for the tombs or *στῆλαι*. When we examine a series of these reliefs of the fine period, we find that the subjects represented are simple scenes of every-day life. We are, moreover, struck by the so-called Attic reserve with which the scenes are treated. Reserve, however, as is well known from such descriptions as those of Lucian, was scarcely the characteristic of Greek mourning—where loud lamentation and tearing of hair and garments formed great part of the proceedings. The explanation of this restraint in the art-representations connected with death must be arrived at by studying archaic *stelai*. The Peloponnesos, as the home of all the early cults of Greece, gives us the original art-types. In a most ancient Spartan relief (Berlin) we see the dead man and woman in a heroized aspect, become almost god and goddess. They are seated on a chair, with snakes and a dog to mark them as divinities of the under world. A procession of tiny worshippers, their living descendants, offer them gifts. A slightly later Spartan relief shows a similar design—but the place of the god or heroized ancestor is now usurped by the mortal man himself for whom the *stele* was raised. His name, Timokles, is written above him. In the Athenian *stelai* the very grouping of these early art-types often remains, but the actors have become mortal; their actions are no longer those of worship given or received, but a common, every-day act. Yet the direct transmission of the sacred hieratic tradition forces the sculptor to keep to a type far removed from sensational emotion. When, as occasionally happened, they departed from these traditions, the art became bad. In the later *stele*, then, the dog is no longer the type of the under world, but the faithful hound of the dead man. Often it is a parting scene between mother and children, where the latter take the place of the worshippers. In the beautiful and well-known *stele* of *Hegeso*, representing a maid giving a jewel-box to her mistress, the maid is but a variation of the worshipper with offerings. In later myths of the Lower World Charon, the ferryman on the Styx, plays an important part. He is often represented on the *lekythos* used for funeral purposes. The second important mythical element was the Siren, so often seen represented in Greek funeral reliefs. Sometimes the Siren alone forms the whole sculpture of the *stele*, as in the beautiful Siren statue at Athens. Sometimes she is sculptured above the funeral slab, on which the dead man is represented. Of all these Athenian graves perhaps the most interesting is that of Dexileos—partly because of its extreme beauty, partly because he was one of the knights who fell at Corinth (B.C. 394). This is his private monument, but Pausanias (i. 29) mentions the public monument of those who were killed at Corinth. This relief, showing a young soldier on horseback with his lance in rest, is typical of the Greek view of death. Death to them was a thing to be met bravely, but when they had to face it for those they loved, they found consolation more in the memory of what the dead man had been in life than in the belief, to them always vague and shadowy, of a future life.

PUBLIC DOUCHE BATHS.

A HOT or cold douche, soap, and a clean towel,—all for a penny! This feat has been accomplished in the city of Frankfort, and the establishment, which has been erected in the centre of a small square in the workmen's quarter, already receives from 200 to 300 bathers daily. The general plan is of the simplest kind: an octagonal enclosure, each side about 14 ft.



long, contains, first, a passage, and then a number of wedge-shaped cells, converging upon a central octagonal hot-air drying space for linen, in the middle of which rises the chimney-stalk of the heating apparatus. The entrance front contains two doors, for men and women respectively, with a pay-office, A, common to both. There are four cells for women and ten for men, with a water-closet to each division at the end of the passage. B is a towel-store, C the drying-room. A lean-to roof covers the passage and cells, 12 ft. high at the eaves, rising to 15 ft. next the inner octagon, which is 20 ft. high and divided into two stories, the drying-room, C, below, with a chamber over, containing the large hot-water circulating cistern, D. Steps at E lead to the basement (inner octagon only), where the furnace and fuel-store are placed. The following is the description of the cells or cabinets, which are all alike. A sliding door, F, admits the bather into a small dressing-room, G, furnished with chair, looking-glass on wall, hooks on door, and linoleum carpet. Thence he proceeds to the further end, H, this portion being divided from the former by a waterproof curtain, to prevent the splashing reaching the clothes in G. Here he finds a basin with hot and cold water, and the douche proper, the temperature of which he can regulate at pleasure, whilst standing on a wooden grating, below which the water is carried off into the drain. The small triangular ducts, K, admit warm air, and as the partitions dividing the cells are only 7 ft. 6 in. high, these ducts transmit an equal temperature throughout the interior. An upright gas bracket is fixed on the top of each partition.

The whole structure only cost 930*l.*, the furniture, linen, &c., 70*l.* more; total, 1,000*l.* Considered financially, and taking the average number of bathers per diem at only 200 at a penny each, the gross income would be 250*l.* per annum; and allowing, say, 150*l.* of this for fuel, water, attendance, and wear and tear, there remains an interest of 10 per cent.—an ample margin of profit for an undertaking which well merits the attention of some of our philanthropists.

COMPETITIONS.

Otley Sewerage.—In the competition for the best scheme for sewerage and sewage disposal for Otley, Yorks, the premium has been equally divided between Mr. W. H. Radford, C.E., of Nottingham, and Messrs. Brierly & Holt, of Manchester.

New Abattoirs for Douglas (*I.M.*)—At the last meeting of the Douglas Town Commissioners, it was resolved to erect new abattoirs on a site known as the "Lake Yard," situated near the railway station. Plans submitted in open competition by Mr. Thomas W. Cubbon, architect, Birkenhead, were unanimously recommended by the committee and adopted by the board. The scheme comprises eight private slaughter-houses, one public slaughter-house, with the necessary lairage accommodation attached, and large cooling-house or dead meat market; also accommodation for pig slaughtering and dressing. The estimated cost of the scheme, including site, amounts to about 7,000*l.*

ARCHITECTURAL SOCIETIES.

Liverpool Architectural Society.—At a meeting of Professional Associates of this Society, held at the society's room on Thursday evening, the 29th ult., the present condition of the society was discussed. In the end, a number of suggestions for the general improvement of the society were agreed to, and a copy forwarded to the President and Council, together with a request that a special meeting be called to take them into further consideration.

Manchester Architectural Association.—At the third ordinary meeting, held on Tuesday last, Mr. A. H. Davies-Colley, A.R.I.B.A. (the President), opened a discussion on "The Improvement of the City," in which Messrs. Chadwick, Hodgson, Mee, and Wilkinson took part. The following resolution was afterwards carried: "That this Association respectfully recommend to the Corporation the formation of a Committee composed mainly of gentlemen outside the Corporation, whose duty shall be to advise on all artistic questions connected with street improvements."

Edinburgh Architectural Association.—This association met on the 29th ult., the President, Professor G. Baldwin Brown, M.A., in the chair. After the usual preliminary business, Mr. David Macgibbon, architect, read a paper entitled "The Castles of the Western Highlands and Islands of Scotland." After a short account of the periods into which Scottish civil architecture might be divided, attention was drawn to the large number of castles of the first period (or thirteenth century) still preserved in this region, and the value of these in connexion with the early history of Scottish architecture, comparatively few specimens of that age being left in the more populous parts of the country. The origin of these castles was then considered, and the light thrown upon them by the general history of the Highlands and Islands, and the conclusion drawn was that they were erected by the Royal authority, and held by a custodier appointed by the Crown. The internal evidence of the buildings pointed to their belonging to the thirteenth century, when the islands became part of Scotland, and when the use of stone and mortar was introduced in castle building. Plans and views of Mingary, Duart, Castle Tirim, Castle Swin, Skipness, Urquhart, and a number of other castles of the thirteenth century were exhibited and explained. Numerous other examples corresponding with the various styles on the mainland were illustrated and

explained, showing that the Scottish style was universal over the whole country, including the isles, for a period of five hundred years.

THE FALL OF BUILDINGS AT THE WEST-END.

On Wednesday afternoon Dr. Danford Thomas, Coroner for Central Middlesex, resumed and concluded the inquest on the bodies of the six men who were unfortunately killed by the fall of buildings in Great Titchfield-street, as already mentioned in the *Builder*.

Among the witnesses called was Mr. George Appleton, builder, of 141, St. John's-hill, who said he had examined the ruins of the fallen building, and he found that the weight of the building stood upon a 14-in. wall. In his opinion, the wall was not sufficiently strong to carry the weight. The wall was built in the ordinary way with mortar, and, in his opinion, it had crushed in itself. He should certainly himself have used cement instead of mortar. He should not have built such a wall without calling the attention of the architect to it. In his opinion, the columns in Riding-house-street had the heaviest weight to carry, and fell first, causing the weight to go on the other columns, and that the wall fell with it.

Mr. Miller, the architect, said he had ascertained that the girder in Riding-house-street had a weight of 37 tons 19 cwt. upon it, and the other girder 21¾ tons upon it at the time of the accident, and the other girders in Great Titchfield-street had 141¾ tons on them. He considered the 14-in. wall sufficiently strong to carry the weight put upon it. He had formed no opinion whatever himself as to the cause of the accident.

Mr. Joseph Jennings, District Surveyor for South Marylebone, deposed that he saw the foundations, and considered them good. The work, generally speaking, was very good, and seemed to be proceeding satisfactorily in accordance with the Act. He had since tested the mortar, and found it was good. He considered the girders as well as the columns strong enough to bear the weight put upon them, He was not prepared to state the cause of the accident.

Mr. George Pluckrose, partner in the firm of Messrs. Oldrey & Co., gave evidence that the works were carried out strictly in accordance with the plans and specifications. He certainly thought that the weight ought to have been more equally distributed. That not being done was, in his opinion, the main cause of the accident.

Mr. Frederick Thomas Reed, engineer, said he had examined the *débris* of the premises, and came to the conclusion that the cause of the collapse of the building was the centre columns, on which there was a weight of 33 tons, and the 14 in. brickwork underneath giving way.

Mr. George Hackford, architect and surveyor, deposed that, in his opinion, the cause of the accident was the central column giving way,—not being sufficiently strong to carry the weight.

Mr. H. H. Collins, District Surveyor for the Eastern Division of the City of London, said he was clearly of opinion that the cause of the collapse was the ground-floor giving way by the heavy weight put upon it. He did not put any responsibility on the architect for this accident. The District Surveyor had no power whatever of suggesting any alteration in buildings being erected, unless they considered it to be a dangerous structure.

After some further evidence, the jury returned a verdict of "Accidental Death," adding that

"The said jurors, after hearing the evidence of the experts, are of opinion that the 14-in. wall, built with mortar, was not sufficiently strong to carry the weight of the superstructure, which on a continuous iron bressummer [the *Times* report is singular in calling it "Bessemer!"] was concentrated upon the column in the centre of the building in Riding-house-street, and the jurors consider that this was the cause of the sudden collapse of the building. The jurors consider that such iron columns should have been placed on brick piers built with cement, and further that the practice of loading the floors of new buildings with materials used for their construction and otherwise should be avoided, as they are likely to cause strains upon the building generally. The jurors are further of opinion that the architect, Mr. Miller, should, in the exercise of his discretion, have taken greater care in designing such building, so as to ensure their stability without risk of any kind; further that they consider that enlarged and discretionary powers should be conferred on District Surveyors so as to permit of more efficient supervision than they at present possess."

BUILDERS' BENEVOLENT INSTITUTION:

ANNUAL DINNER.

The forty-first anniversary dinner in aid of the funds of this institution was held on Thursday, the 29th ult., at Carpenters' Hall, London Wall. Mr. J. Howard Colls, President of the Institution, occupied the chair, and was supported by Mr. Alfred Rosher (Master of the Carpenters' Company); Mr. John Aird, M.P.; Mr. H. H. Bartlett; Mr. Arthur Lucas; Sir George Chubb; Prof. Roger Smith, F.R.I.B.A.; Mr. Chatfeild Clarke, F.R.I.B.A.; Mr. Thomas Blashill, F.R.I.B.A.; Mr. Rickman; Mr. Banister Fletcher, F.R.I.B.A.; Mr. G. Burt, J. P.; Col. Stanley Bird, and other friends of the institution, the whole company numbering about 230.

The Chairman gave the toast of "Her Majesty the Queen, the Prince and Princess of Wales, and the rest of the Royal Family."

Mr. J. W. Hobbs (Mayor of Croydon) gave "The Army, Navy, and Reserve Forces," Major Brutton replying for the "Army and Navy," and Col. Stanley Bird for "The Reserve Forces."

Sir George Chubb proposed "The Houses of Parliament," for which Mr. John Aird, M.P., responded.

The Chairman, in proposing the toast of the evening, "Success to the Builders' Benevolent Institution," said that the charitable institutions were the pride of this country and the envy of other nations. The builders had not been backward in the good work, and he was proud to say that the most distinguished members of the trade had been his predecessors in the chair. The members of all professions and trades were liable to misfortune and reverse. The business of a builder was deeply interesting, and there was nothing monotonous about it except Saturday night (laughter). It was a manufactory of a vast number of articles, subject to difficulties both above and below ground. Sometimes intense heat brought its calamities, and at other times intense frost, or too much wind. The responsibility of the builder never ceased, but lasted as long as he lived, for if anything went wrong he was sure to hear of it. He did not wish to say anything against the professions with which they were associated. As a rule nothing could be fairer than the treatment the builders received at their hands, but at the same time many of the claims on this Institution came from men who had suffered from the exceptions to that rule—from the architect who had supplied defective drawings, and from the quantities of inefficient quantity surveyors. Any of those troubles was likely to lead to disaster, and they ought to remember that however stable they might feel at the moment, any one of them might encounter such a calamity as would make them glad to apply for help to such a society as the Builders' Benevolent Institution. Unfortunately the Institution had of late been suffering from the depression of trade, and the subscriptions had fallen off. If there was a time when an institution like this ought to be supported it was in times of depression, and he asked them to support him, and show the world that the builders were a benevolent race. The chairman added that as Mr. George Plucknett, J.P., the hon. treasurer, was not with them that evening, they would simply drink the toast without reply.

The toast having been duly honoured,

The Chairman next gave "The Health of the Carpenters' Company," referring to the kindness of the Company to the building trade, or any branch of it.

Mr. Alfred Rosher (Master of the Company) replied, and said that it was the duty of the Company to do what they could for the advancement of the craft.

Mr. Arthur Lucas proposed "The Health of the Chairman and President," adding that every one who knew Mr. Howard Colls knew that whatever he undertook he entered into *con amore*, and it would be difficult to find a worthier occupant for the Presidential chair.

The toast was well received, and the Chairman replied in suitable terms.

Mr. H. H. Bartlett gave "The Architects and Surveyors." The presence of so many members of the professions showed their sympathy with the builders. The work done by the architects of the present day would, he believed, stand comparison with that of any of the great architects of the past. In fact, there was no important thoroughfare in the metropolis in which they could not see works rising around them which must tend to elevate the taste and character of the people. In old times the architect and surveyor were coupled together, but the less that was the case the better, as the surveyor should hold the balance between the architect and the builder. He coupled the toast with the names of Mr. T. Chatfeild Clarke and Mr. T. M. Rickman.

Mr. Chatfeild Clarke said he believed at times the architects must have been looked upon as ogres, but that feeling was passing away, and the builders felt they could not trust themselves more comfortably than in the hands of a respectable architect. At the same time, the architects never could carry out their work successfully without putting their trust in a responsible and respectable builder. They were, therefore, there in a sort of partnership, and it was a sincere pleasure to him to be present.

Mr. Rickman responded for the surveyors.

Mr. Maton gave the concluding toast, "The Vice-Presidents, Committee, and Stewards," which was responded to by Messrs. T. F. Rider and J. T. Bolding.

In the course of the evening subscriptions and donations amounting to the unusually large total of 1,053*l.* (of which sum 804*l.* appeared in the President's list) were announced.

CASE UNDER THE BUILDING ACT.

At the Marylebone Police-court, Messrs. Daw & Son, of Kensington, builders, were summoned by the Metropolitan Board of Works for unlawfully forming a street without giving two entrances of the statutory width of 40 ft., contrary to 25 and 26 Vic., c. 102, and By-law. Mr. Thos. Burton, solicitor, appeared for the Board; and Mr. A. C. Glen for the defendants.

The facts were as follows:—In 1886 the defendants submitted plans to the Board for their approval, such plans showing a way 60 ft. wide, and open at both ends, as required by the By-law. The way in question was to lead out of the north side of Bayswater-road, Paddington, on the Shaftesbury House Estate, and was to be called "Torwood-gardens," and the street was approved by the Board on condition that no barriers were at any time to be erected, or other obstructions caused to the free use by the public of the said road. After such approval the defendants leased certain portions of the road, and buildings were commenced by the different owners, and they also commenced to build a lodge at one end of the road, considerably reducing the width of the way.

On behalf of the defendants it was contended that the way was a private one, and the Act did not apply.

After hearing the evidence, Mr. De Rutzen said he would view the *locus in quo*, and give judgment in a day or two. At the adjourned hearing Mr. De Rutzen said he had viewed the spot, and he found that it was a "new street," but that the erections at the ends thereof were of a merely temporary character, they being simply put up for the protection of workmen's tools, and therefore he should dismiss the summons without costs, leaving the Board to take any action hereafter which they might think proper if more substantial erections were put up.

Notice of appeal was given by the Board.

CONCRETE FLOORS.

Sir,—Some time ago you suggested that I should send you a detailed statement about the concrete floors of the building at No. 63, Lincoln's Inn-fields. I have delayed doing so till now, as I wished to describe another experiment at the same time, and both only after they had been some time completed.

I have made concrete floors in two ways, in three buildings of very different class, and in each instance the result has been satisfactory.

Except for its Doulting-stone front and some parts of the party walls, which are brick, the large eight-story building in which I am writing, and which was built from my designs, is entirely of concrete,—walls, partitions, foundations, floors, and roof. The foundation of the main block is a single slab of cement concrete, 3 ft. thick, and on this (without other footings) the walls were formed of river ballast, coke breeze, and cement. The floors were put in as the walls arrived at the various levels. The size of nearly all the rooms is about 19 ft. by 15 ft. Across these areas 4 in. by ¼ in. wrought-iron bars were set on edge, with 2 ft. intervals, and not less than 6 in. bearings on the side walls and partitions. A series of ½ in. round bars, arranged lengthwise of the room, was threaded through holes in the flat bars, also with 2 ft. intervals, so that the floor-space was divided into squares 2 ft. each way. Likewise all the ends of each series of 4 in. by ¼ in. bars were threaded with one of these ½ in. bars about an inch from their extremities, so that, as the wall of the next storey was built, this outer round bar was built in and effectually secured the ends of the main bars therein. Where adjacent sets of 4 in. bars had their ends resting on one partition, the ends were made to pass each other, and threaded on the same round bar, which in such case was put in the middle of the thickness of the partition. Finally, between each pair of 4 in. bars, and lying on the ½ in. round bars, a ¼ in. square rod was placed, with each end running a few inches into the wall. This network of rods was formed on a platform of rough boards, and blocked up ¾ in. above it. The concrete was made of coke breeze and Portland cement, mixed in the usual way and well beaten down between and over the bars and their bearings to a total thickness of 7 in. Over these concrete cores a surface, which in most rooms consisted of granite grit and cement paving an inch thick, was laid at the time the walls were rendered. The ceilings,

like the walls, were plastered with Martin's cement on selenitic, and distempered with Orr's washable "duresco." The roof-surfaces were covered with asphalte. Externally the concrete walls were rendered with Portland cement, and distempered with "duresco,"—a material which (as well as the same maker's silicate paint and enamel) experience has led me to value highly. The staircases are in all cases (by choice of the owner) built with walls on either hand instead of with open wells. A sloping slab of concrete, like that of the floors, and made in position in the same manner, bears on the wall on each side and carries the pressed concrete steps, the ends of which merely abut against the walls. The floors, roofs, and stairs, formed as above said, are exceedingly strong and rigid, and there is not a known crack in any one of them.

The second building referred to is a warehouse off Great Queen-street. Here the floors were required to be strong enough to carry heavy goods and machinery in motion. They were divided into 15 ft. bays by means of rolled-iron girders and columns, and these carried a framework of bars similar to that previously described, but with the 4 in. bars only 1 ft. apart, and the small square rods omitted. The concrete was laid as an arch, with flat upper surface, the springing of the soffit being from the bottom flange of the iron girders, and the thickness at the crown about 9 in. The floor-surface was of granite grit and cement, and the roof was asphalted. The walls of this building were entirely of concrete, rendered with Portland cement internally and externally, and distempered with duresco. The columns and the soffits of girders were cased with fireproof plaster, all other parts of the girders being covered by the concrete floor. Everything is quite sound and flawless.

The third use of concrete was in the case of a stable building in Sussex. Here the walls were of local stone externally, with a cement concrete core, and a brick inner lining. The floors and roofs were of concrete without girders, and four of them had a clear span of 20 ft. by a length of over 60 ft., so that they consist of monoliths of those dimensions, without any intermediate support whatever. They are of broken brick and Portland cement, rendered on soffit and floor-surface with Portland cement and sand, the roofs being asphalted. In these large floors, the bars are $2\frac{1}{2}$ in. by $\frac{1}{2}$ in., set on edge, 9 in. apart, and with $\frac{1}{2}$ in. round bars laced through holes in their ends over the walls. No other bars or rods are used. The total thickness, including cement, ceiling, and surface, is 12 in. Where the bearings were shorter the thickness was reduced, and the bars were put further apart. There is no crack or settlement anywhere.

WM. SIMMONS.

63, *Lincoln's Inn-fields, W.C.*

ELM CHURCH.

SIR,—May I be permitted to mention that the priest's door at Elm Church, noticed by Mr. Greenslade in his too-brief description of that fine church (page 379 *ante*), as "an interesting feature," owes its unusual position,—"in the extreme north-east corner of the chancel," indeed actually opening within the altar rails,—to the chancel having been curtailed? Mr. Greenslade mentions that "the East wall has been rebuilt, with a new Decorated window inserted," but he does not seem to be aware that at the rebuilding the wall was erected many feet westward of its original site; and thus, as Mr. Greenslade's carefully-executed drawings show, the proportions of the chancel, and the general outlines of the church were much injured. Mr. Greenslade fails to call attention to the remarkable similarity between the tower of Elm Church and,—*parvis componere magna*,—the western tower of its not-very-distant neighbour, Ely Cathedral. In each we have a square tower supporting an octagon flanked by octagonal turrets. Elm still preserves the small, low lead spire which was foolishly pulled down at Ely some time towards the close of the last century.

EDMUND VENABLES.

The Tilbury Docks Arbitration.—A news agency circulates the following:—"The four years' arbitration between Messrs. Kirk & Randall and the East and West India Dock Company terminated on Wednesday in an award by Sir Frederick Bramwell in favour of the contractors on all points. The arbitrator decides that the turning-out was illegal, and that there was due to the contractors for work done at the time of their eviction a balance of upwards of £195,000, apart altogether from damages for the wrongful eviction, which have yet to be assessed, and for which the contractors' claims are £300,000. The dock company has to pay all costs."

The Student's Column.

ARTIFICIAL STONES.—XXIII.

Methods of Indurating Artificial Stone by Exposure to Gases (continued).

MACBAY'S patent (1876, pat. 776) involves the admixture with the stone composition of any suitable fibres, such as those of jute, flax, tow, hemp, rhea, cotton, coir, bran-husks, pine needles, &c., &c. A more recent patent bearing on the subject is that of Keller (1885, pat. 13,699), in which it is directed to add to gypsum or other binding cement that may be used in the production of artificial stone, small pieces of metallic wire to impart a fibrous nature to the stone and increase its power of resisting tensile strain.

One portion of Boden's patent (1881, pat. 1,817) relates to the insertion of wires in the body of the stone blocks, so that they can be the better bound together. The stone itself was to be formed of an outer shell of porcelain or other earthenware having a surface glaze, and filled in with a composition made up of one part of lime and two parts of sand, moistened with a solution containing shellac, glue, borax, alum, and soda.

Ransome obtained in 1865 provisional protection only for an arrangement for strengthening artificial stone by moulding the composition round pieces of hoop-iron.

An expedient of a different nature to any we have been discussing was that patented by R. Searle, in 1882, with a view to the production of a dense, hard stone. Portland cement is mixed with hot water, placed in suitable moulds, and connected with an air exhaust pump to extract all the air, the cement being allowed to set in an exhausted atmosphere; the stones may be protected with a coating of water glass, mixed with soluble silica in the form of Farnham stone.

Miscellaneous Stone Compositions, &c.

Of the miscellaneous compositions there are several of some interest. Melted sulphur has been utilised by several patentees as a binding material for the earthy or stone base. In 1859 J. Simon, of Paris, patented a composition which he termed "Zeidolite," composed of a mixture generally of about 42 lb. of powdered stoneware or glass, to 19 lb. of sulphur, melted and mixed together at as low a heat as possible and run into moulds. The substance resists acids, moisture, and atmospheric influences, and does not melt under 250° Fahr., so that in some circumstances it can be used as a substitute for asphaltum. Ponton, in 1861, brought out a substance he called "Silicious Stoneware," which does not differ essentially from "Zeidolite," being composed of ground flints, quartz, Lynn sand, tripoli, or other silicious powders, mixed with sufficient melted sulphur to bind them together. By a later patent (1877, pat. 1,884), the same inventor patented artificial stone manufactured by working up clay, or similar material with sulphur and water, then moulding, carefully drying, and finally heating up to 250° Fahr. to melt the sulphur and bind the whole mass together. Brault, Watkins, & Smith's "Improved Marble or Decorative Compound," patented in 1880, has sulphur as the cementing material, to which is added, in about the proportion of two to one, any kind of powdered stone, marble, ivory, bones, &c., mixed with any suitable colouring matter.

In 1883 a patent was obtained by Mr. T. Smith, of Sunbury, for a building or paving composition, which was to be composed of the cleansed scrapings of macadamized roads finely ground and mixed with chalk and coke-dust, in the proportion of 43 parts of the "macadamized scrapings" to 20 parts of chalk and 37 parts of coke-dust; the mixture is then incorporated with melted sulphur. In some cases sand may be substituted for road scrapings. In a second patent, taken out in 1885, Mr. Smith improves upon this compound, and directs that the débris of macadamized roads, broken china, &c., be washed, calcined, ground to fine powder; 60 parts of this powder are mixed with 40 parts of sulphur and melted together in a copper pan provided with an agitator. When in a fluid condition it is poured on to a slab and allowed to cool in a thin layer; and when required for use it is again melted and cast into moulds of the necessary shape.

RECENT PATENTS.

ABSTRACTS OF SPECIFICATIONS.

14,184, Window and Door Fasteners, J. G. W. Fairbarn and R. Jones.

The fastener which is the subject of this patent is made in two parts, one the socket and the other the bolt. The socket is simply a base-plate, with tapered or parallel hole to receive the end of the bolt. On the bolt part is a bolt-piece with suitable bearings and a scroll-piece. This slot-piece and bolt is encased, and the bolt is operated by means of a loose key. When the fastener is turned the scroll-piece catches in a pin of the bolt, and forces it forward.

17,733, Flushing Water Closets, &c., J. Breden.

An open-bottomed hollow cylinder and a disc or piston, working with a syphon in the cylinder, is the important claim in the specification of this invention. The bend of the syphon is flattened horizontally, so that a slight rise of the water-level suffices to set the syphon in action. The body of the supply cistern pipe and fittings are cast all in one piece.

17,919, Shape of Sash or Balance Weights, D. S. Heys.

The weights which are the subject of this patent are made conical-shaped at each end, so as to pass one another without catching. The cord is run longitudinally in the centre of the weight, and fastened somewhat similarly to the ordinary method, but in the middle of the weight. The weight always hangs perpendicularly, and does not catch in passing.

1,062, Chimney Pots and Terminals. G. F. Verini.

According to this invention, the chimney-pot is closed at the top by a lid, and round the shaft vertical rectangular shafts are cut, and these openings are fitted with a radial projecting plate protecting the slot from side wind. Gear is attached by which, when one of the slots is closed by the protector, the other is automatically opened.

12,325, Sash Fasteners. W. Yelland.

The fastener to which this patent relates operates by a rod or bolt at the meeting stiles of the sash and also at the top where the sash is let into the framework of the window. A screw-threaded shank operates the bolts and also forms the locking arrangement.

12,741, Preventing Down-draught in Chimneys. J. B. Tonge.

In order to reduce the expense in fitting tops, according to this invention, the chimney-pot is fitted with a series of outlets and flaps curved at the edges. Another modification is the use of movable flaps and corresponding outlets in a pot of suitable shape and material, and in flues where the prevention of down-draught may be required.

NEW APPLICATIONS FOR PATENTS.

Nov. 23.—17,022, J. Howie, Syphon Flushing Cisterns.—17,049, T. Mattock, Plumbers' Shave-hooks.—17,059, J. Brockie, Sash-fastener.—17,062, T. Birnbaum, Flexible Mouldings or Filets for Joinery and Decorative Work.

Nov. 24.—17,117, F. & E. Cornish, Fastenings for Window-sashes, &c.

Nov. 26.—17,149, D. McDonald, Workmen's Can Appliance.—17,186, W. Maguire, Water-closet Basins, &c.

Nov. 27.—17,215, A. Richardson, Window or Sash-fastener.—17,247, L. Scott, Hot Water Warming and Heating Stoves.—17,250, T. Edwards, Fire-escapes and Ladders.—17,257, W. Cussans, Colouring and Ornamenting Portland Cement, &c.

Nov. 28.—17,288, C. Lindsay, Art Decoration and Register Grates or Stoves.—17,305, J. Haywood and J. Hunt, Sash-fasteners, &c.—17,312, R. Warwick, Fibrous Plastering Work, &c.—17,325, A. Armstrong, Electrical Bell, Battery, and Push for Street-doors.—17,364, C. Young, Automatic Bolt for Double Doors.—17,372, G. Stephan, Movable Timber Sawing-machines.

PROVISIONAL SPECIFICATIONS ACCEPTED.

13,030, F. Abbey, Trap for Waste and Drain-pipes.—13,970, H. Bates, Wood Screws.—14,382, T. Dalton, Opening, Closing, and Securing Skylights, &c.—14,956, A. Bremner, Combined Latch and Bolt.—14,990, J. Colton and J. Lambert, Glass Mosaic Work.—15,022, R. White and P. Ayton, Door Furniture.—15,136, E. Cain, Weather Strips of Doors.—15,398, H. Planner, Disinfecting Apparatus for W.C.'s, Drains, &c.—15,568, H. Richardson and E. Dickinson, Guards for Brickmaking Machines.—15,601, C. Harcourt, Electric Bell-push Fittings.—15,605, L. Barber, Ladder.—45,621, E. Lyon, Decorative Window-panes or Panels.—15,795, P. Davies, Lead Tanks and Ventilating Same.—15,879, J. Clayton and C. Tindall, Water Closets.—15,920, J. Lightbody, Water Cisterns.—16,019, H. Owens, Mechanism for Operating Fanlights, &c.—16,155, J. Thornton, Fireplaces.—16,203, F. Hawkes, Sash Cords.—16,214, J. Phelps, Eaves, Gutters, and Roofs.—16,408, J. Sharples, Flushing Water-closet Pans.

COMPLETE SPECIFICATIONS ACCEPTED.

Open to Opposition for Two Months.

546, C. Wright, Fastener for Windows, Doors, &c.—888, H. Waddington, Draught Preventers for

Doors and Windows.—1,046, W. Redish, Fire-grates.—1,072, E. Reynolds and G. Catford, Circular Saw-benches.—1,199, A. Brown, Ventilator.—1,255, J. Kaye, Bolting and Unbolting Doors, Windows, &c.—1,389, O. Erfurth, Holder or Support for Scaffolding.—3,236, H. Whitehouse and J. Clifford, Sash Fasteners.—7,604, W. Bois, Door Barrel Bolts, &c.—7,878, G. Hobson, Metal Floorings or Roofings for Bridges, &c.—14,587, J. Kirkbride, Window-sashes.—14,968, W. Stead, Sliding Window-sashes, &c.—15,061, G. Kenrick, Hinge.—15,235, G. Hayes, Sheet-Metal Lathing.—15,434, W. Yuill, Drain Taps.—15,489, G. Jennings, Sanitary Appliances for Water-closets, &c.

RECENT SALES OF PROPERTY.

ESTATE EXCHANGE REPORT.

Nov. 27.

By Harman Bros.

Brixton—158, Stockwell Park-road, 55 years, ground-rent £2	£750

By Eastman Bros.

Hornsey—5, Ormond-road, 90 years, ground-rent £6. 10s.	180
New Southgate—30, Holly Park-road, 90 years, ground-rent £6	90

By Ventom, Bull, & Cooper.

West Ham—1 and 2, Myrtle-villas, freehold	820
East-road—The Congregational Church, freehold.	875
The Dudley, Sedgley, and Wolverhampton Tramways, with plant	10,600
Sedgley—Dudley-road, a plot of freehold land	200
Tottenham—Ground-rents of £26. 5s., reversion in 89 years	550
Dalston—Ground-rents of £50 a year, term 57 years	955

Nov. 28.

By Walker & Runtz.

Hammersmith—48, The Grove, freehold	600
52 and 54, The Grove, freehold	1,160

Nov. 29.

By Douglas Young.

Walworth—1, 2, and 3, Thomas-place, freehold	700
Clapham-road—No. 400, term 28 years, no ground-rent	510

By J. J. Deverell.

Fulham—41, Lillyville-road, 90 years, ground-rent £8	

By A. Booth.

Drury-lane—6 and 7, Wild-court, freehold	1,325
Camden-road—No. 147, term 54 years, no ground-rent	1,385
No. 149, term 54 years, ground-rent £15	1,600

By Moss & Jameson.

Bermondsey—15, 17, and 19, Lucy-road, 45 years, ground-rent £14	670

By Newbon & Harding.

Highbury—37, Compton-road, 57 years, ground-rent £7. 12s.	395
South Hackney—7 and 9, Brampton-road, 64 years, ground-rent £9. 9s.	550
Stoke Newington—59, Winston-road, 72 years, ground-rent £5	275
Caledonian-road—87, John-street, 56 years, ground-rent £2. 2s.	485
Green Lanes—4, Brownswood-park, 71 years, ground-rent £11	405
Hoxton—104 and 106, St. John's-road, 17 years, ground-rent £90	650
Holloway—9 to 15 odd, Yerbury-road, 79 years, ground-rent £30	1,290

By E. Stimson.

Camberwell—3 to 11 odd, Southampton-street, 92 years, ground-rent £42. 10s.	1,000
64 and 66, Picton-street, 25 years, ground-rent £2. 4s. 6d.	270
9, Chiswell-street, 25 years, ground-rent £1	125
Peckham—10, 12, and 14, Hazelmere-road, 80 years, ground-rent £20	430
Southwark—48, Trinity-square, 6¾ years, ground-rent £6	95
131, St. George's-road, 13 years, ground-rent £6. 15s 9d.	225
Clerkenwell—17, Wilmington-square, 27 years, ground-rent £8	510
Fulham—25 to 33 odd, Walham-avenue, 95 years, ground-rent £26. 5s.	355
Lambeth—20, 22, and 24, Hunt-street, 53 years, ground-rent £10	380
Ground-rents of £35. 4s. 6d., term 21 years	375
Ground-rents of £23. 16s., term 21 years	240

By Field & Son.

Rotherhithe—17 and 19, Swan-lane, 72 years, ground-rent £4	200
Buckhurst Hill—Thanet Villa, and a plot of land, freehold	930
Bermondsey—161, Abbey-street, 76 years, ground-rent £6. 10s.	395
59, Reverdy-road, 52 years, ground-rent £5	340
Peckham—15, Marsden-road, 87 years, ground rent-£5. 5s.	285
72 to 90 even, Lower Park-road, 25 years, ground-rent £51. 5s.	1,100

Nov. 29.

By Dyer, Son, & Hilton. (On premises.)

Eltham, High-street—Globe House, freehold	750

By Worsfold & Hayward. (At Dover.)

Dover—41, Castle-street, freehold	470
St. Margaret's—Freehold house, with garden	200
Dover—16, Pencester-road, with stabling, freehold	1,350
18, Bench-street, freehold	1,475
1, Queen-street, freehold	860
3 and 4, Priory-street, freehold	910
2, 3, and 4, Thornton-lane, freehold	220
6, Pleasant-row, freehold	125
49 and 50, East Cliff, freehold	210
83, Limekiln-street, 40 years, ground-rent £5. 10s.	215
A plot of freehold land in Barton-road	540
Ewell—A plot of freehold land	95

By Farebrother, Ellis, Clark, & Co.

Regent-street—Nos. 129 and 131, term 32 years, ground-rent £97. 10s.	8,600
201, Regent-street, and 67, Conduit-street, 33 years, ground-rent £42	10,100
Kensington—2, St. Mary Abbott's-terrace, 16 years, ground-rent £10. 3s. 4d.	850
Westminster, Victoria-street—Ground-rents of £420, reversion in 77 years	£11,100
Westbourne Park, All Saints'-road—Ground-rents of £40, reversion in 75 years	1,000
Tavistock-crescent—Ground-rents of £39, reversion in 75 years	1,015
Ground-rents of £8. 10s., reversion in 75 years	220
St. Mary's-road—Ground-rents of £18, reversion in 76⅔ years	450
Finsbury Park—Ground-rents of £42, reversion in 86¼ years	1,048
Ground-rents of £178, reversion in 89¾ years	4,463

Nov. 30.

By H. A. Henderson.

Clapton—131, Rushmore-road, 88 years, ground-rent £5	200
Stroud Green—85 and 87, Ferme Park-road, 90 years, ground-rent £17	605

By Baker & Sons.

Putney—12, Fairfax-terrace, 97 years, ground-rent £21	2,200
Harlesden—45, Nicoll-road, 85 years, ground-rent £10	380
Enfield—Ground-rents of £75, reversion in 98 years	1,680
Ground-rents of £60, reversion in 99 years	1,260
Ground-rents of £25, reversion in 98 years	525
Willesden—Ground-rents of £42, reversion in 92 years	760

MEETINGS.

Monday, December 10.

London Institution.—Professor Sylvanus Thompson, B.A., on "The Colours of Polarised Light." II. 5 p.m.

Society of Arts (Cantor Lectures).—Captain W. de W. Abney, F.R.S., on "Light and Colour." III. 8 p.m.

Society of Engineers.—Annual General Meeting. 7.30 p.m.

Leeds and Yorkshire Architectural Society.—Mr. J. A. Heaton on "Beauty in Colour and Form. How to Seek, Where to Find." 7.30 p.m.

Tuesday, December 11.

Institution of Civil Engineers.—Mr. J. Oliver Arnold, F.C.S., on "The Influence of Chemical Composition on the Strength of Bessemer Steel Tires." 8 p.m.

Wednesday, December 12.

Society of Arts.—Mr. W. H. Deering, F.C.S., on "Explosives." 8 p.m.

Society of Engineers.—Annual Dinner, Guildhall Tavern, Gresham-street. 6.30 p.m.

Liverpool Engineering Society.—Mr. W. N. Blair on "The Salt Water Supply to the Public Baths, Bootle." 8 p.m.

Thursday, December 13.

Society of Telegraph Engineers and Electricians.—(1) Annual General Meeting to receive the Annual Report of the Council and for the Election of Council and Officers for the ensuing year. (2) Discussion on Mr. H. Edmunds' paper on "A System of Electrical Distribution." 8 p.m.

Society of Antiquaries.—8.30 p.m.

St. Paul's Ecclesiological Society.—Rev. J. R. Buchanan on "Herne Church, Kent." 7.30 p.m.

Edinburgh Architectural Association.—Dr. A. C. Elliot, C.E., on "Recent Departures in Electrical Engineering." 8 p.m.

Friday, December 14.

Architectural Association.—Mr. W. Doubleday on "Symbolism." 7.30 p.m.

Institution of Civil Engineers (Students' Meeting).—Mr. J. King-Salter on "The 26-knot Spanish Torpedo Boat, *Ariéte*." 7.30 p.m.

Miscellanea.

The Glass and Ceramic Gallery at the British Museum.—It has been calculated that in the section of glass and ceramic art the value of the donations of private individuals is ten times greater than the sum total of the grants received from the Treasury, and probably the same may be said of the other departments. We will not stay to inquire the cause, but in the case of museums private munificence is invariably found to be stimulated by national liberality, and especially when it is known that handsome and spacious galleries will be provided for the objects. In this particular the parsimony of the Government has been altogether short-sighted. Years ago it was pointed out that the land on which the houses stand in Montague-street, Montague-place, and part of Bedford-square, that enclose the Museum, ought to be secured for its extension. Had this been done the removal of the Natural History departments to South Kensington—a most unpopular proceeding—would not have been necessary. Even now, considering the natural expansion of the collections, at least some portion of the site must be acquired. Fortunately the patriotic bequest of Mr. William White supplied funds for the erection of the recent galleries, of which that of glass and ceramics is a portion; but it is clearly undesirable that the Museum should be dependent on private generosity for the extension of its buildings. Rather such gifts or bequests should be exclusively devoted to the enrichment and completion of the collections. At the present time, when scientific excavations are being energetically prosecuted in so many quarters, it will need a plentiful relaxation of the purse-strings, both public and private, if the Museum is to hold its position in relation to those of other countries, and as the Acropolis of Art and learning of the English-speaking race.—*From the Art Journal for December.*

Sale of Building Land at Romford.—Last week Messrs. Baker & Sons held a large sale of freehold building land, at the Golden Lion Hotel, High-street, Romford. The property consisted of eighty plots, being a portion of the Heath Park Estate, Romford, situated close to the town, and about ten minutes' walk from the Romford station of the Great Eastern Railway. The estate was described as situated on high ground, with commanding and picturesque views of the country for several miles around, and specially adapted for the erection of houses and shops. The estate, which is the property of the National Standard Land Company, has a frontage of upwards of 1,200 ft. to the main high road to Brentford, several new roads having also been laid out, intersecting the estate in a north-easterly direction. Most of the plots submitted have frontages of 20 ft., with depths averaging from 120 ft. to 150 ft., some larger plots having frontages from 40 ft. to 80 ft. There was a large company present. Mr. Baker, the auctioneer, before inviting offers, adverted to the rapidly-increasing value of building-land in Romford and the locality, observing that, as a business centre in Essex, the population was fast increasing, and that there was at present little uncovered land in the neighbourhood. He added that there was every prospect of property in the neighbourhood being still further increased in value and Romford becoming a favourite residential locality, as the town would shortly be placed in communication with Southend, and also with Tilbury, by the new lines of railway which the Great Eastern Company are now constructing from their main line to those two towns. There was a very active demand for the several lots submitted, out of the entire number offered sixty-five being sold. The plots having 20 ft. frontage realised from 25*l.* to 27*l.* each., whilst a corner shop plot, having a frontage of 80 ft. to Brentwood-road, and a depth of 95 ft., was sold for £65; and another corner plot, close adjoining, having a frontage of 55 ft., and a depth of 140 ft., realised 50*l.* The proceeds of the sale amounted to about 1,900*l.*

The English Iron Trade.—The better tendency in the English iron trade which showed itself last week is maintained, the market having grown stronger. Notwithstanding decreased shipments in November, and increased stocks at the end of the month, prices of pig-iron have advanced, the prospect as to the future being reassuring. Scotch warrants have gone up, and makers' iron is also quoted higher than last week. Middlesbrough iron may be said to have gained 3d. on the week. In Lancashire, prices of pig are firm, and the same holds good for Lincolnshire, Derbyshire, and Staffordshire brands. Hematites in the North-West are 1s. better in price. Manufactured iron is in fairly active demand, the tendency of values being in an upward direction. Tin-plates are in rather better inquiry, and the tone of the market has improved. There is great activity in steel, rails especially being largely ordered. It is reported that the Ebbw Vale Company has booked an order for 80,000 tons of rails,—at what price is not stated; but rates are very firm generally. There is a large consumption of shipbuilding material. Activity continues to prevail in the shipbuilding and engineering trades, and engineers are now able to secure better prices. —*Iron.*

Aluminium.—Another alloy of aluminium, which possesses very nearly the same qualities of lightness as the pure metal, and has, in addition, the advantage of being readily soldered, has been introduced by M. Bourbouge. Tin, which easily alloys with aluminium, cannot be used directly for soldering, but impure tin, which has already dissolved aluminium, acts with the greatest facility on the pure metal, and that alloy, after solidification, is equally acted on by pure tin. Observing these facts, M. Bourbouge determined to rub heated aluminium with an alloy of aluminium containing 45 per cent. of tin, and then to solder the surfaces so prepared in the usual manner. The alloy of aluminium, with 10 per cent. of tin, also possesses the property of soldering with tin, having at the same time the useful qualities of the pure metal. The alloy will take a fine polish, and does not tarnish when exposed to air. Cold hammering gives it a certain quality of elasticity. The discovery is one of considerable value and further increases our interest in this valuable metal upon which so much attention has been turned of late.

Death of Mr. C. F. Hansom, Architect. We regret to announce the death, on the 30th ult., of Mr. Charles Francis Hansom, F.R.I.B.A., President of the Bristol Society of Architects, at the age of seventy-two. Mr. Hansom received his professional training from his brother, the late Mr. Joseph Aloysius Hansom, architect,—founder, in 1842, of the *Builder*, and inventor (in 1836) of "Hansom's Patent Safety Cab" (see *Builder*, July 8, 1882). He early showed considerable originality in his work, and by careful study obtained a great reputation, not only amongst the public, but also amongst his professional brethren. He was a most successful designer of churches, and in the Gothic revival of 1840, he took a prominent part. According to the *Bristol Times and Mirror*, he laboured so assiduously that altogether he designed between sixty and seventy churches. There are many buildings in the neighbourhood of Bristol which illustrate Mr. Hansom's style. He was the architect of Clifton College and the University College, and he superintended the rebuilding of St. Paul's Church, Clifton, after it was destroyed by fire, in 1867. The first church erected by the Bristol Church Extension Commissioners — Christ church, Barton-hill—was also designed by him. The Pro-Cathedral at Clifton, which is said to have been at one time falling to pieces owing to the settlement of the foundations, was restored, and a new front added, under the direction of Mr. Hansom, who, in addition, renovated the Roman Catholic church at Bath. During the last few years Mr. F. B. Bond has been in partnership with Mr. Hansom, and since then the firm have done a great deal of work for the Bristol School Board. The interment took place at Perrymead Cemetery, Bath, on Tuesday.

Messrs. J. W. Hobbs & Co. (Limited).—The annual staff dinner of this well-known building company took place on Saturday evening last, at the Holborn Restaurant, Mr. G. C. Kentish, secretary, in the chair. About ninety sat down to table. Mr. Woollett, in proposing the principal toast "J. W. Hobbs & Co., Limited," and Mr. Kentish, in replying on behalf of the Company, spoke of the great enterprises in which they were or had been engaged, including the erection of such large blocks of buildings as Carlisle Mansions, Westminster; the Hôtel Victoria, Northumberland-avenue; Whitehall Court, on the Victoria Embankment; the lofty block of buildings at Albert-gate, Knightsbridge; Queen's Buildings (industrial dwellings), covering the site of the Queen's Bench Prison, Southwark; the new buildings on the Salisbury Estate, Strand (for which excavations have just been commenced), Coventry Park estate (villa residences), Streatham, and other undertakings. Mr. Hobbs, the managing director, was unable to be present, owing to duties incumbent upon him as Mayor of Croydon. His son, Mr. Walter J. Hobbs, responded to the toast of his father's health. The other toasts included the Managers and Foremen" (proposed by Mr. Currie, cashier, and responded to by Messrs. Austing and Pounds), "The Sub-Contractors" (proposed by Mr. Holland, and responded to by Mr. Stephen Collins), "The Office Staff" (proposed by Mr. Owens, and responded to by Mr. B. Bailey), "The Architects and Surveyors" proposed by Mr. Charles Till, and replied to by Mr. Rossiter), and "The Visitors" (proposed by Mr. Caine, and replied to by Mr. C. Randall).

The Lord Mayor on Plumbing.—At a meeting held last week at the Lambeth Polytechnic Institute, the Lord Mayor said that in going through their workshops he was delighted beyond measure to see they had a class for practical plumbing. There was no greater need at the present time than a perfect knowledge of sanitary science. One of the Livery Companies of the City (the Plumbers' Company) had established a system of registration for plumbers, and at the last examination twenty out of thirty were rejected. It might be asked, "Why should plumbers be registered?" He would answer, Why should chemists be registered? The object was that they might not poison their neighbours; but where a chemist poisoned one, bad plumbing poisoned fifty. Therefore he said, "Go on with your plumbing classes and your technical schools, and the probability is you will greatly improve the condition in which you live."

Election of a Royal Academician.—It is announced that at a general assembly of Academicians and Associates held on Wednesday evening, Mr. John Bagnold Burgess, painter, was elected an Academician.

Extensive Sale of Leaseholds in Regent-street and Ground-rents in Westminster and Westbourne Park.—On Thursday in last week, Messrs. Farebrother, Ellis, & Co. conducted a very large sale of West-end properties at the Auction Mart. The Regent-street property comprised the shop and premises, No. 129, on the west side, which realised 4,000*l.* The adjoining premises, No. 131, were also sold for 4,600*l.* Both properties are held from the Commissioners of Woods and Forests, for a term of ninety-nine years from April, 1821, at a rental for the entirety of 90*l.* per annum, and 7*l.* 10s. per annum in lieu of land-tax. No. 129 yields a profit rental of 295*l.* per annum, and No. 131 yields a profit rental of £296*l.* per annum, with reversion in 1894 to an increased annual value. Messrs. Farebrother also sold the corner-shop and premises, 201, Regent-street, and 67, Conduit-street, held for a term of ninety-nine years from 1822, at a ground-rent of 42*l.* per annum. These premises form the principal portion of Messrs. Cramer's establishment, the well-known piano manufacturers and music publishers. They produce a present profit rental of 468*l.* per annum, with reversion at Midsummer next to an estimated greatly-increased annual value. They were sold for 10,000*l.* The same auctioneers also sold several important ground-rents, secured on properties in Victoria-street, Westminster, and in Westbourne Park, which realised 19,301*l.*,—the total proceeds of the day's sale being brought up to 38,850*l.*

Liverpool Engineering Society. — An open meeting of this society was held on November 28, Mr. C. H. Darbishire, Assoc.-M.Inst.C.E., in the chair, when, among other matters, a new method of stowing and lowering of ships' life-boats was explained by Captain Gell, and the difficulties and dangers attending the launching of such life-boats in cases of wreck during storm were discussed. Geological specimens dug up in the construction of sewerage works in Essex were exhibited by Mr. E. R. Window.

PRICES CURRENT OF MATERIALS.

TIMBER.	£.	s.	d.	£.	s.	d.
Greenheart, B.G. ton	6	10	0	7	10	0
Teak, E.I. load	9	0	0	14	0	0
Sequoia, U.S. foot cube	0	2	3	0	3	0
Ash, Canada load	3	10	0	5	0	0
Birch ,,	3	10	0	6	0	0
Elm ,,	4	0	0	5	0	0
Fir, Dantsic, &c.	2	0	0	4	0	0
Oak ,,	2	0	0	4	10	0
Canada	5	10	0	7	0	0
Pine, Canada red	3	5	0	4	0	0
,, yellow	3	10	0	5	10	0
Lath, Dantsic fathom	4	10	0	5	10	0
St. Petersburg	5	0	0	6	10	0
Wainscot, Riga, &c. log	2	15	0	4	5	0
,, Odessa, crown	2	15	0	3	5	0
Deals, Finland, 2nd and 1st...std.100	10	0	0	10	10	0
,, ,, 4th and 3rd	7	0	0	9	10	0
Riga	7	0	0	8	0	0
St. Petersburg, 1st yellow	10	10	0	15	10	0
,, 2nd ,,	9	0	0	10	0	0
,, white	8	0	0	10	10	0
Swedish	8	0	0	16	10	0
White Sea	9	0	0	17	10	0
Canada, Pine, 1st	16	0	0	25	10	0
,, ,, 2nd	11	0	0	17	10	0
,, ,, 3rd, &c.	7	10	0	10	10	0
,, Spruce, 1st	9	0	0	10	0	0
,, ,, 3rd and 2nd	7	0	0	8	10	0
New Brunswick, &c.	6	15	0	8	15	0
Battens, all kinds	5	10	0	12	0	0
Flooring Boards, sq., 1 in., prepared, First	0	11	0	0	14	6
Second	0	8	0	0	10	9
Other qualities	0	5	6	0	7	9
Cedar, Cuba foot	0	0	3½	0	0	3¾
Honduras, &c.	0	0	3½	0	0	3¾
Australian	0	0	2¾	0	0	3
Mahogany, Cuba	0	0	4½	0	0	5½
St. Domingo, cargo average	0	0	4½	0	0	5½
Mexican ,,	0	0	4½	0	0	4¾
Tobasco ,,	0	0	4½	0	0	5½
Honduras ,,	0	0	4½	0	0	5½
Box, Turkey ton	5	0	0	12	0	0
Walnut, Italian foot	0	0	4½	0	0	6½
METALS.						
IRON—Bar, Welsh, in London...ton	4	17	6	5	0	0
,, ,, at works in Wales ...	4	7	6	4	10	0
,, Staffordshire, in London ...	5	15	0	7	0	0
COPPER—						
British, cake and ingot ton	80	0	0	80	10	0
Best selected	80	10	0	82	0	0
Sheets, strong	85	0	0	86	0	0
Chili, bars	78	0	0	0	0	0
YELLOW METAL lb.	0	0	7¼	0	0	7½
LEAD—						
Pig, Spanish ton	13	0	0	13	1	3
English, common brands	13	5	0	13	7	6
Sheet, English	14	5	0	14	10	0
SPELTER—						
Silesian, special ton	18	12	6	18	15	0
Ordinary brands	18	10	0	18	12	6
TIN—						
Banca ton	103	0	0	0	0	0
Billiton	102	0	0	0	0	0
Straits	100	10	0	0	0	0
Australian	100	10	0	0	0	0
English Ingots	103	0	0	0	0	0
ZINC—English sheet ton	22	10	0	23	10	0
OILS.						
Linseed ton	18	10	0	0	0	0
Cocoanut, Cochin	28	10	0	29	10	0
Ceylon	27	0	0	0	0	0
Palm, Lagos	28	0	0	0	0	0
Rapeseed, English pale	31	10	0	0	0	0
,, brown	30	0	0	0	0	0
Cottonseed, refined	23	5	0	0	0	0
Tallow and Oleine	19	0	0	45	0	0
Lubricating, U.S.	5	0	0	6	0	0
,, refined	7	0	0	12	0	0
TURPENTINE—						
American, in casks cwt.	1	14	6	0	0	0
TAR—Stockholm barrel	1	1	6	1	1	9
Archangel	0	12	0	0	12	6

COMPETITIONS, CONTRACTS, & PUBLIC APPOINTMENTS.

Epitome of Advertisements in this Number.

COMPETITIONS.

Nature of Work.	By whom required.	Premium.	Designs to be delivered.	Page.
Sea Barrier	Filey Local Board	25*l.*	Dec. 27th	ii.
Drinking Fountain, Southampton	Mrs. B. Sayer's Exors.	20 Guineas	Feb. 1st	ii.
Courts of Justice, Police & Fire Brigade Stns	York Corporation	100*l.*, 50*l.*, and 25*l.*	Feb. 16th	ii.

CONTRACTS.

Nature of Work, or Materials.	By whom required.	Architect, Surveyor, or Engineer.	Tenders to be delivered.	Page.
New Schools and Teachers' House on old site	Harrow-on-the-Hill, &c. School Board	*Official*	Dec. 11th	ii.
Kerbing, Tarpaving, &c.	Lewisham Bd. of Works	do.	do.	ii.
Roadmaking Works	Cheshunt Local Board	T. Bennett	do.	ii.
Connexions from Main Sewers to Houses	do.	do.	do.	ii.
Repairs to Shaft, &c.	St. Mary (Battersea) Vestry	*Official*	Dec. 12th	xi.
Roadmaking and Paving Works	Fulham Vestry	J. P. Norrington	do.	xi.
Roadmaking Works	Wandsworth and Clapham Union	T. W. Aldwinckle	Dec. 13th	ii.
Works and Materials	St. George Hanover-square, Vestry	G. Livingstone	Dec. 15th	ii.
Roadmaking Works	Hornsey Local Board	T. de Courcy Mead	Dec. 17th	xi.
New Wing to Infirmary	Woolwich Union	J. O. Cook	Dec. 20th	xi.
Street Lighting	Finchley Local Board	G. W. Brumell	Dec. 21st	xi.
New Bridge and Removal of Existing Bridge	Glasgow, Hillhead, &c., Joint Bridge Com.	Miller & Bell	Dec. 31st	ii.
Pipe Sewers, &c.	Hendon R.S.A.	*Official*	do.	xi.
Repairing and Painting Railings, Pimlico	Met. Board of Works	do.	Jan. 8th	xi.
Laying out Dulwich Park	do.	do.	Jan. 10th	xi.
Wesleyan Chapel, Charlton	.....	H. H. Church	Not stated.	ii.
Foundations, College Extension	Liverpool Univer. Coll.	A. Waterhouse	do.	xi.

PUBLIC APPOINTMENTS.

Nature of Appointment.	By whom Advertised.	Salary.	Applications to be in.	Page.
Assistant Surveyor	Leigh Local Board	Not stated	Dec. 10th	xvi.
Building Inspector	Willesden Local Board	150*l.*	Dec. 11th	xvi.
Assistant Surveyors, R. E. Dept.	Civil Service Com.	Not stated	Jan. 4th	xvi.

TENDERS.

[Communications for insertion under this heading must reach us *not later than* 12 *Noon on Thursdays.*]

AUDENSHAW.—For the erection of a vicarage, for the parish of St. Stephen's, Audenshaw. Mr. J. H. Burton, architect, Warrington-street, Ashton-under-Lyne :—

Thos. W. Bates, Droylsden	2,390	0	0
William Neal, Ashton-under-Lyne	2,320	0	0
Joseph Lawe, Hooley Hill	2,297	11	4½
Joseph Davison, Manchester	2,281	10	0
Washington Hurst, Audenshaw	2,280	2	6
Thomas Rome, Manchester	2,267	0	0
Butters & Carson, Manchester	2,249	0	0
R. Hilton & Sons, Oldham	2,199	19	0
William Holt, Manchester	2,196	0	0
C. Wallworth, Gorton, near Manchester	2,175	0	0
Ralph Whiteil, Manchester	2,142	0	0
Allen Holmes, Ashton-under-Lyne	2,131	0	0
Thos. Dean, Ashton-under-Lyne	2,130	2	0
Jabez Gibson, Dukinfield	2,125	0	0
Fitton & Bowness, Ashton-under-Lyne	2,097	0	0
Thomas Storer, Denton	2,065	0	0
John Robinson, Ashton-under-Lyne	2,052	0	0
W. Underwood & Bros., Dukinfield	2,047	12	9
Joseph Clayton, Denton	2,021	12	0
Charles Morris, Ashton-under-Lyne	2,019	11	6
J. W. Williamson, Ashton-under-Lyne	1,995	0	0
Garside, Barnes, & Co., Stalybridge*	1,995	0	0

*Accepted.

BRENTFORD.—For supplying and fixing iron posts and railings round recreation ground, for the Brentford Local Board. Mr. F. W. Lacey, A.-M.I.C.E., surveyor :—

W. Hickinbotham	£226	10	10 !
W. Summerscales & Sons	182	0	0
W. Colbert	178	0	0
G. Coxall & Co.	172	2	0
W. Brettell	165	0	2
Gardner, Anderson, & Clarke, E.C.	159	7	6
G. Smith & Co.	148	6	11
Goddard, Massey, & Warner	147	3	4
Constructional Ironworks Company, Limited	144	5	0
Hill & Smith	141	17	6
Wenham & Waters, Limited	140	3	4
L. Faulkner & Sons	134	13	0
Crosthwaite Union Foundry	113	17	6
F. Bird & Co.	104	15	0
B. C. Badham & Co., Holborn*	97	9	11 !

* Accepted.

CAMBRIDGE.—For erecting central hall and offices, Cavendish College, Cambridge. Messrs. John Giles, Gough, & Trollope, architects. Quantities by Mr. C. H. Goode :—

Girling, Ipswich	£7,185	0	0
W. Bell & Sons, Cambridge	6,721	0	0
Willcock, Wolverhampton	6,245	0	0
Bentley, Waltham Abbey	6,185	0	0
Claridge & Bloxam, Banbury*	6,090	0	0

* Accepted.

HASTINGS.—For new workhouse, sinking well, and running headings, for the Guardians of the Hastings Union. Mr. Philip H. Tree, architect, St. Leonard's-on-Sea :—

Contract No. 1.

Tilley & Sons, London	£1,624	0	0
Badham & Co., London	1,262	0	0
Holls & Co., London	1,250	0	0
Piper & Son, Hastings	639	0	0
Bines, Hastings	576	0	0
Marchant, Hastings	545	0	0
Gutsell, Hastings (accepted)	526	0	0

HORSHAM.—For the erection of a house and offices at Market-square and South-street, Horsham, for Colonel James Clifton Brown. Messrs. E. & C. H. Burstow, Horsham and Horley, architects and surveyors :—

Jos. Potter	£1,222	0	0
P. Peters	1,139	0	0
Pannett Bros.	1,098	0	0
H. Potter	1,075	0	0
Geo. Sharp	999	0	0
Rowland Bros. (accepted)	990	0	0

[All of Horsham.]

LONDON.—For the erection of shop and premises, High-street, Camden Town, for Messrs. W. J. Brimage & Co. Mr. Ernest Grose, architect, 13, Railway-approach, S.E. Quantities by Mr. John Moir Kennard :—

Wall Bros.	£1,949	0	0
W. Scrivener & Co.	1,864	0	0
C. Killingback	1,728	0	0
W. Downs	1,725	0	0
Toms	1,717	0	0
Gould & Brand*	1,693	0	0

*Accepted subject to certain deductions.

STAMFORD HILL.—For new billiard-room, stabling, &c., at St. Mary's, Amhurst Park, for Mr. C. W. Bradley. Mr. E. C. Homer, architect, 99, Gresham-street, E.C. Mr. G. Silvester, surveyor, 35, Walbrook, E.C. :—

Lascelles	£1,340	0	0
Grover & Son	1,290	0	0
Gaisford	1,255	0	0
Staines & Son	1,244	0	0
Killby & Gayford	1,213	0	0
Chessum & Sons	1,023	0	0

WINDSOR.—For the erection of a new Burton Union room and cellars for Messrs. Burge & Co., Victoria Brewery, Windsor. Messrs. Llewellins & James, architects, Bristol. Quantities by Messrs. Brown & Young, 5, Henrietta-treet, Covent-garden, W.C. :—

Wall Bros., London	£2,757	0	0
Nightingale, Lambeth	2,635	0	0
Holles, Windsor	2,592	0	0
Stephens & Bastow, London	2,565	0	0
Reavell, Windsor	2,531	0	7
Chappell, London	2,469	0	0
Woodbridge, Maidenhead	2,295	10	0
Watson, Ascot (accepted)	2,255	0	0

WOODFORD.—For erecting villa residence, Claremont-grove, Woodford, Essex, for Capt. Way. Mr. Theodore Moore, architect, 144, Mile End-road.

J. A. Reed, Walthamstow (accepted)	£670	0	0

TO CORRESPONDENTS.

P. & P. (address noted).—J. M. (thanks).—G. R. D.—W. H. C. (shall have attention).—G. T.—A. P. S. (no space this week).—H. B. B.—G. H. M.—O. & R.—W. D. (no space this week).—T. J. H.—H. T. W. (no space).—C. H.—H. J. J.—H. C. S.—E. T. S.—F. R. C.—H. I. (send us an instance).—E. & S.—M. S. & Co.—M. P.—H. F.—F. W. R. & Co. (next week).—E. G.—S. T.

All statements of facts, lists of tenders, &c., must be accompanied by the name and address of the sender, not necessarily for publication.

We are compelled to decline pointing out books and giving addresses.

Note.—The responsibility of signed articles, and papers read at public meetings, rests, of course, with the authors.

We cannot undertake to return rejected communications.

Letters or communications (beyond mere news-items) which have been duplicated for other journals, are NOT DESIRED.

All communications regarding literary and artistic matters should be addressed to THE EDITOR; all communications relating to advertisements and other exclusively business matters should be addressed to THE PUBLISHER, and *not* to the Editor.

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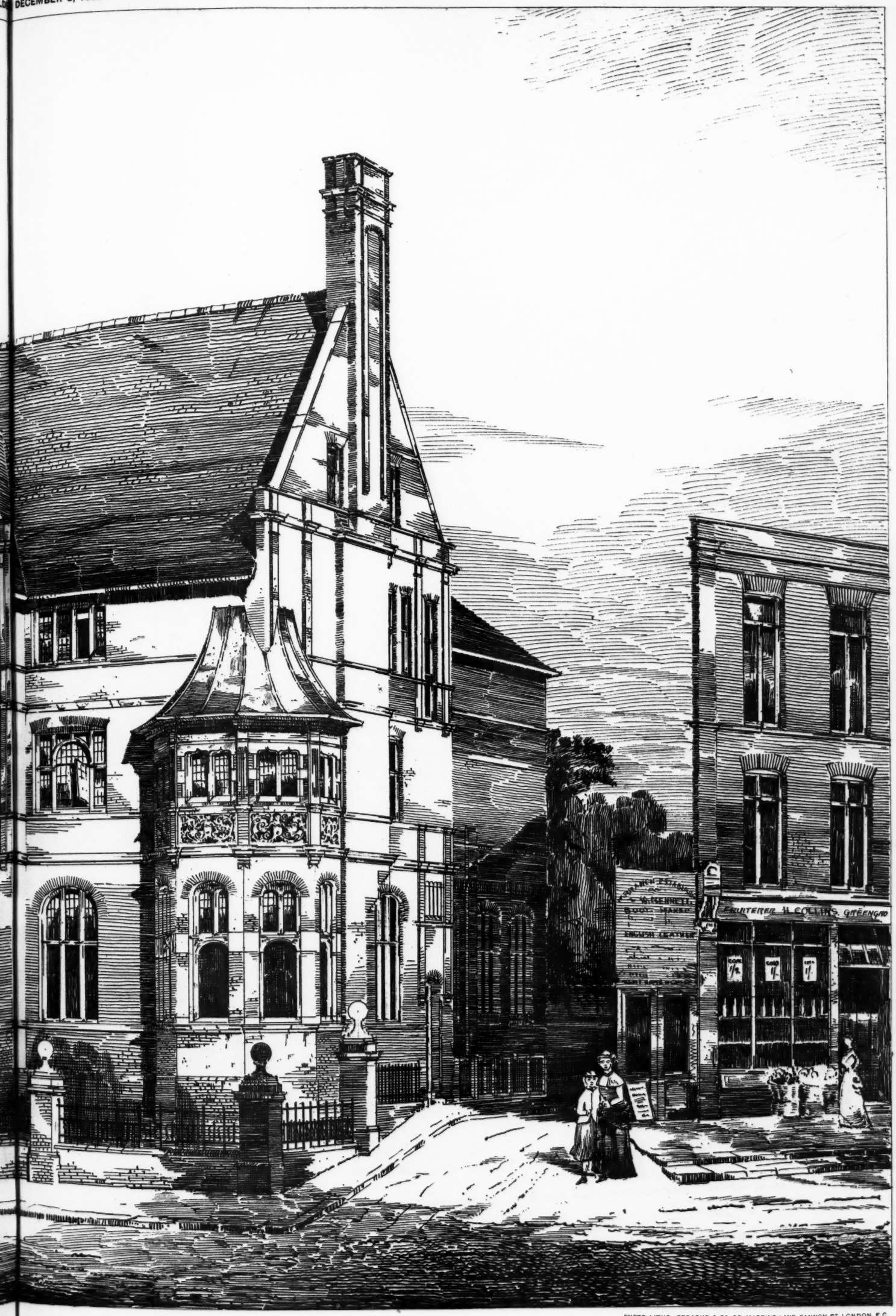

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FIRST PREMIATED DESIGN.—Mr. E. W. Mountford, A.R.I.B.A., Architect.

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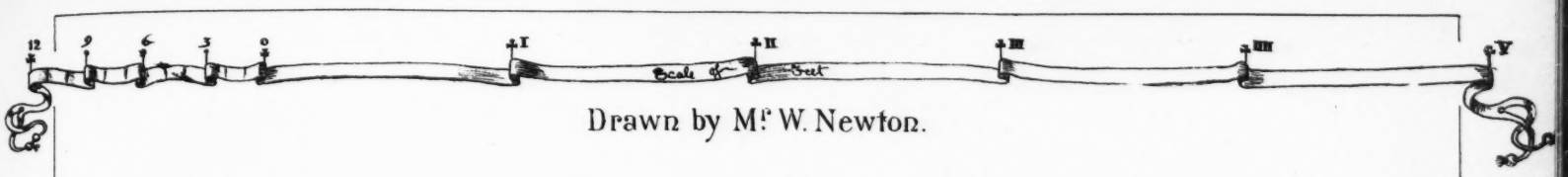
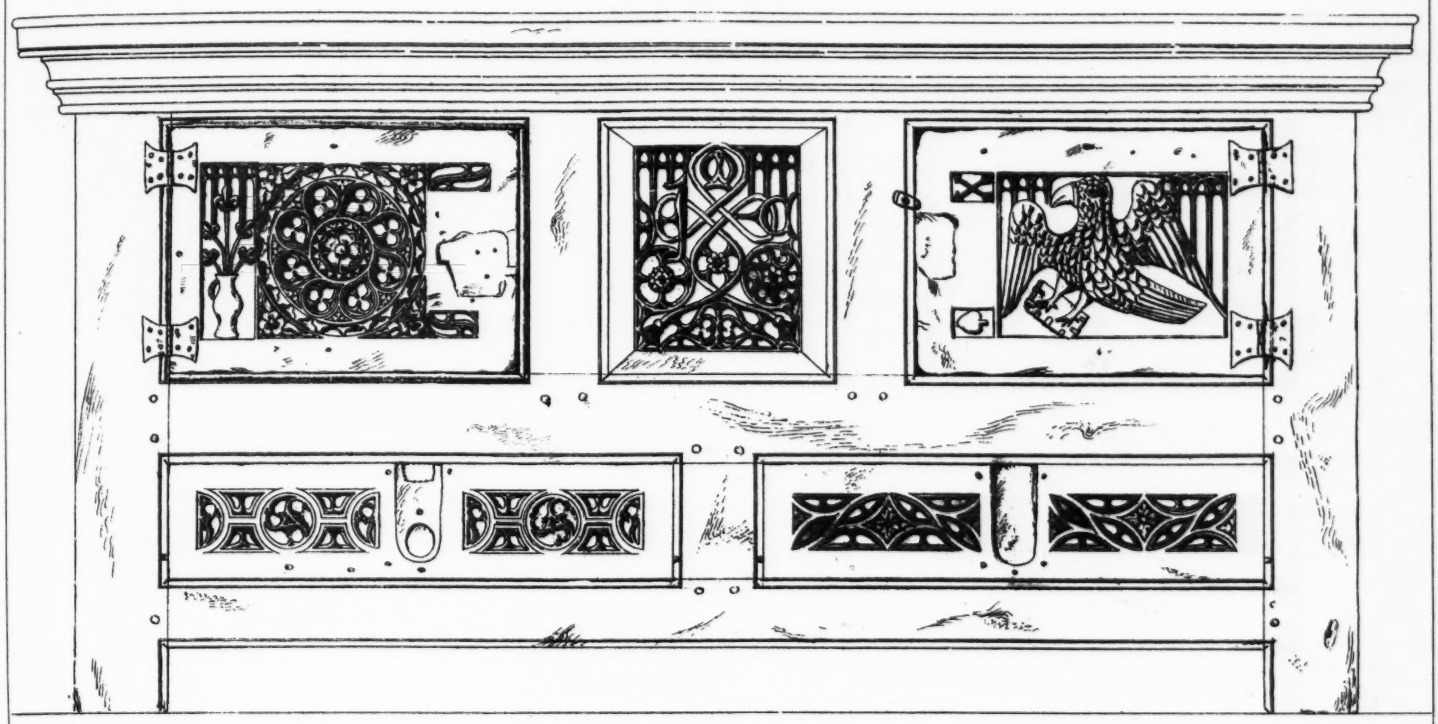
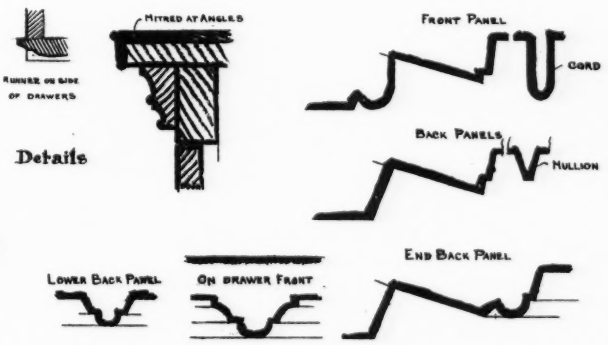
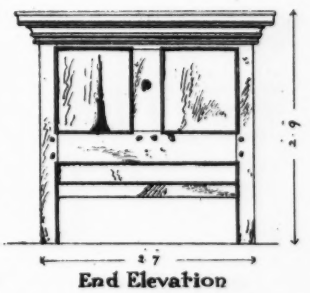


Drawn by Mr. W. Newton.

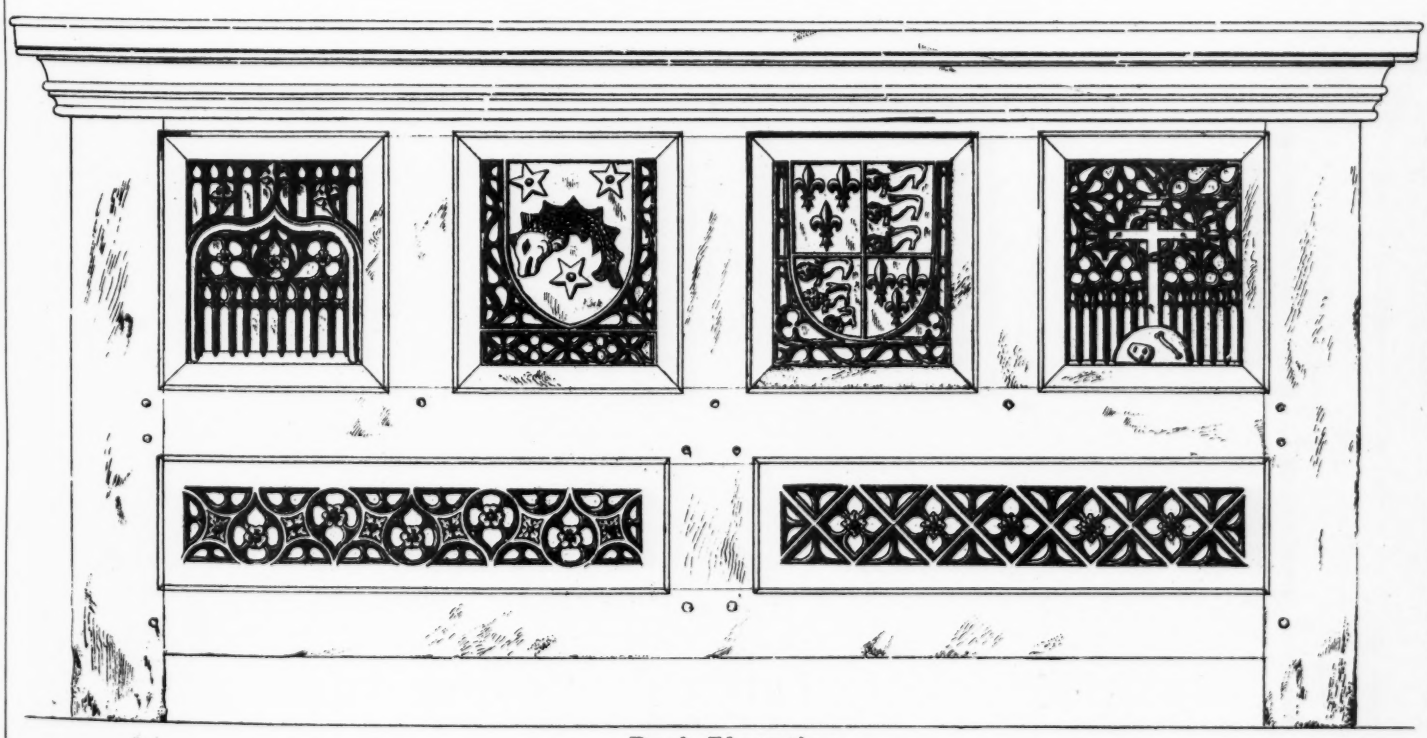


Front Elevation





End Elevation



Back Elevation.

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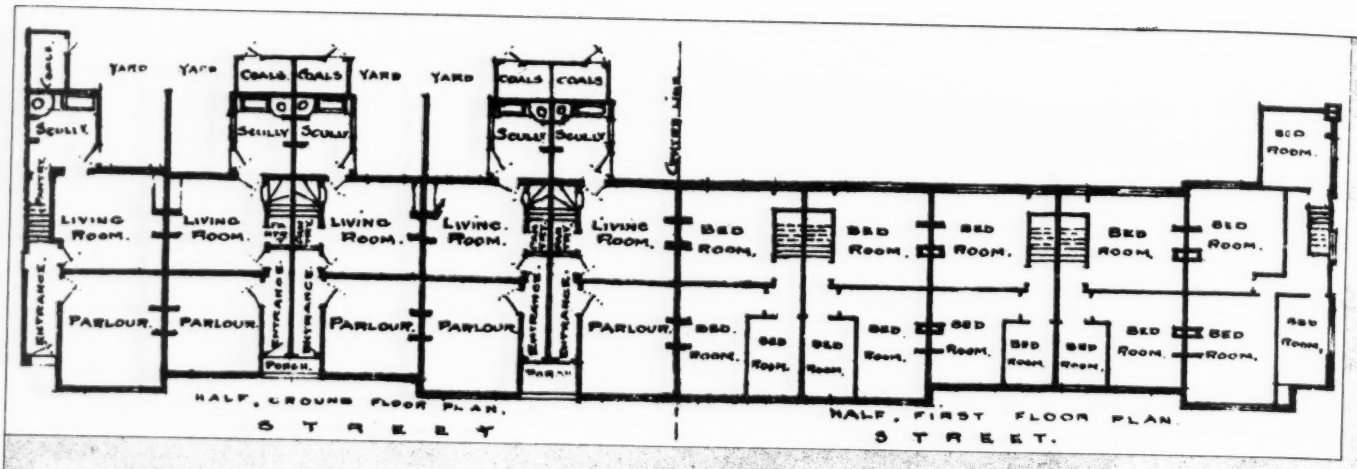

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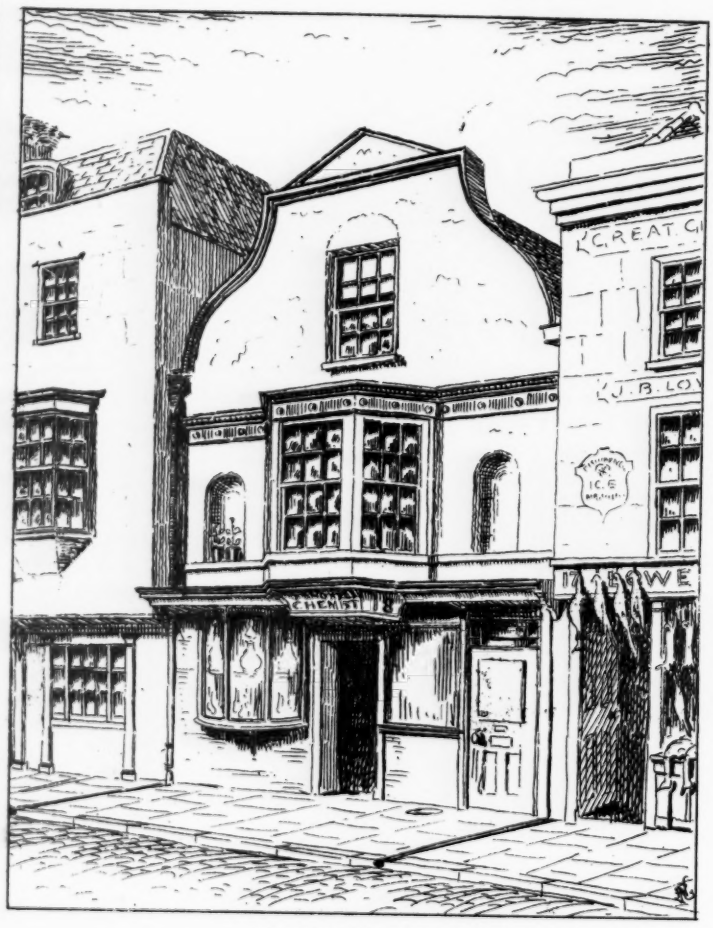
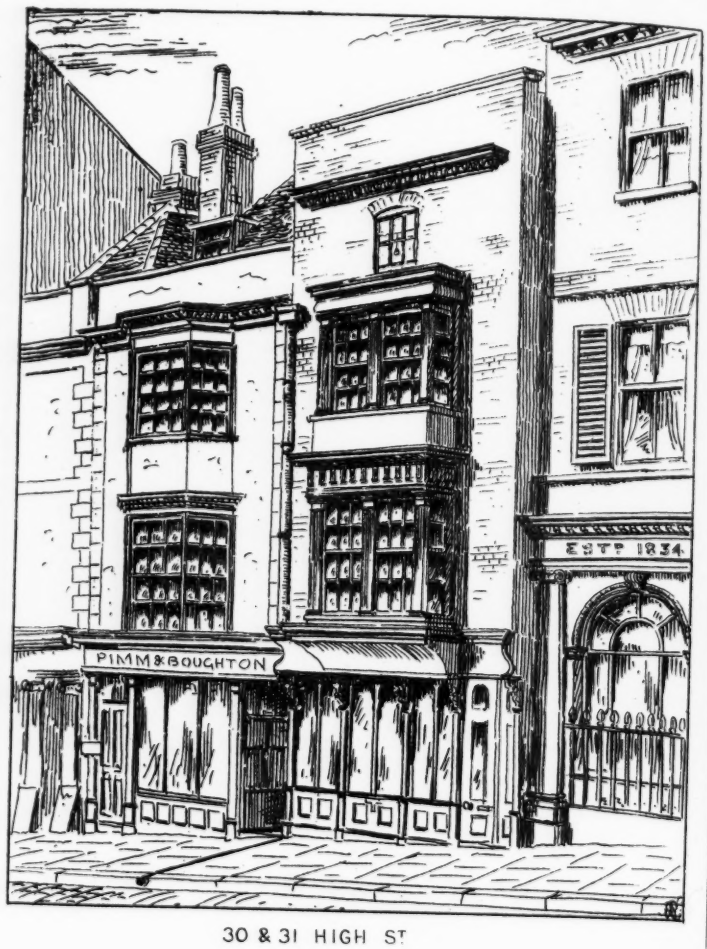
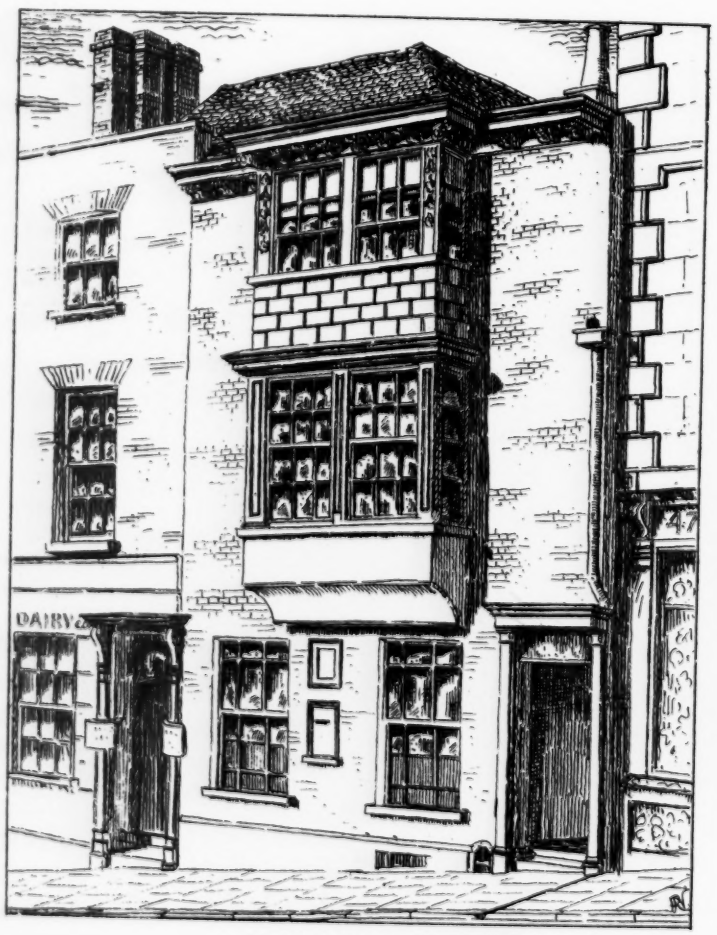


18 HIGH ST, GUILDFORD



30 & 31 HIGH ST



48 HIGH ST, GUILDFORD

56 & 57 HIGH ST

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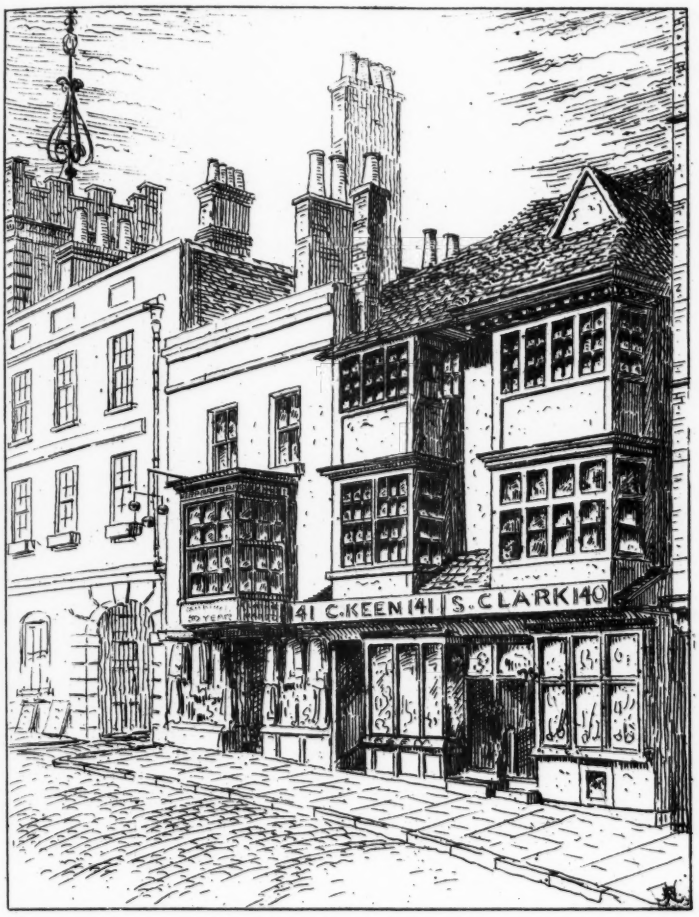
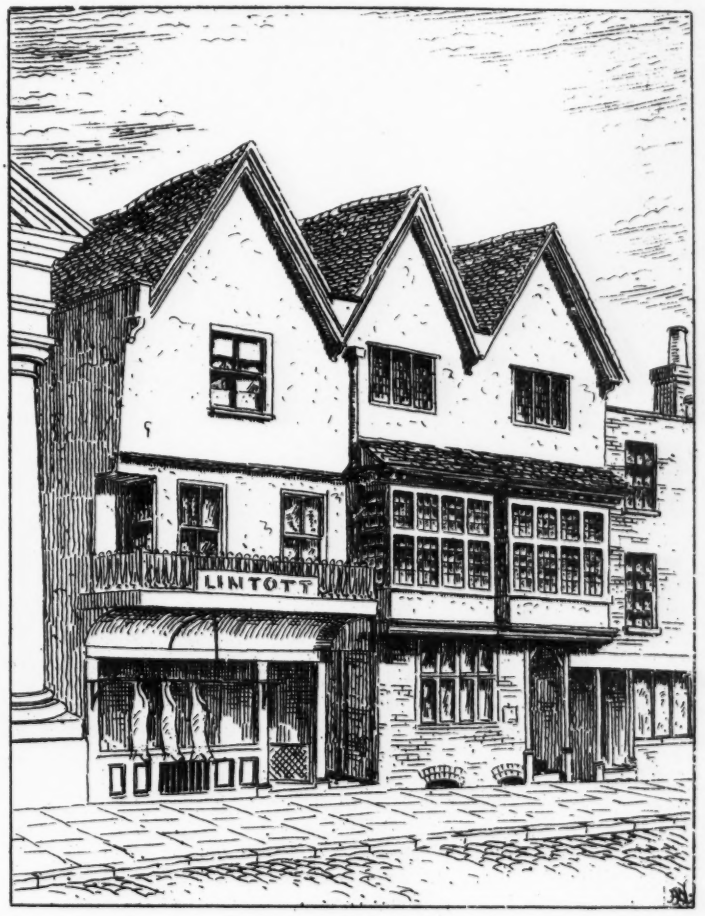
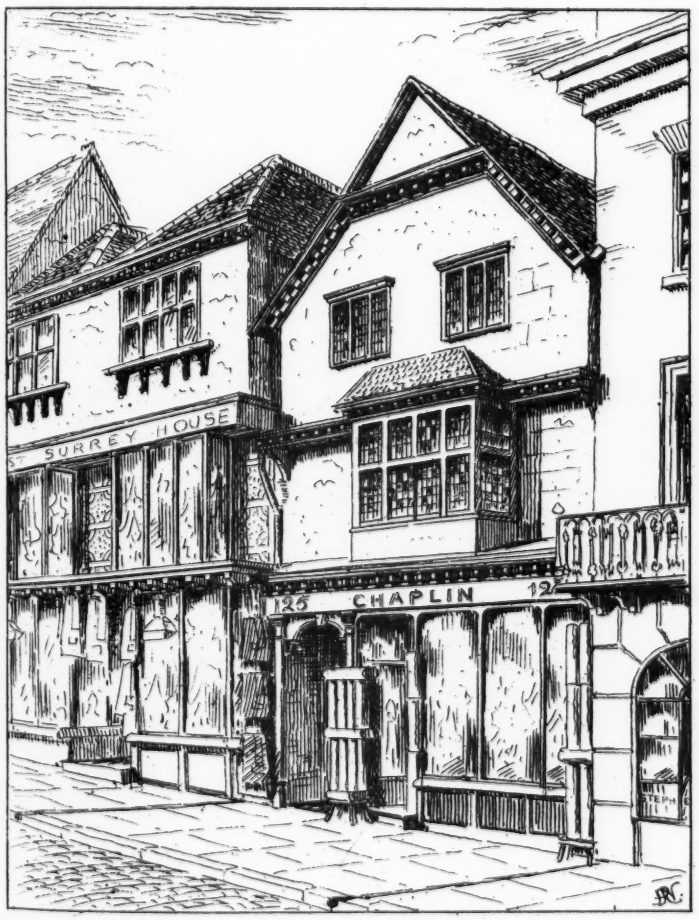
OLD COTTAGE ARCHITECTURE.—From Sketches by Mr. Ralph Nevill, F.S.A.



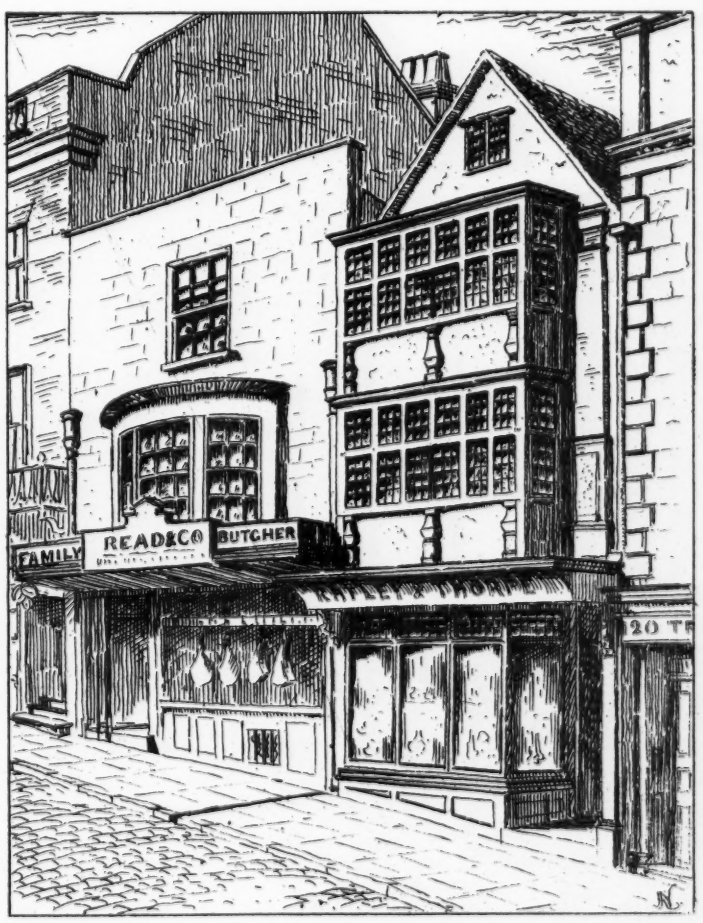
140 & 141 HIGH ST, GUILDFORD.



133 & 134 HIGH ST



125 HIGH ST, GUILDFORD.



121 HIGH ST

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